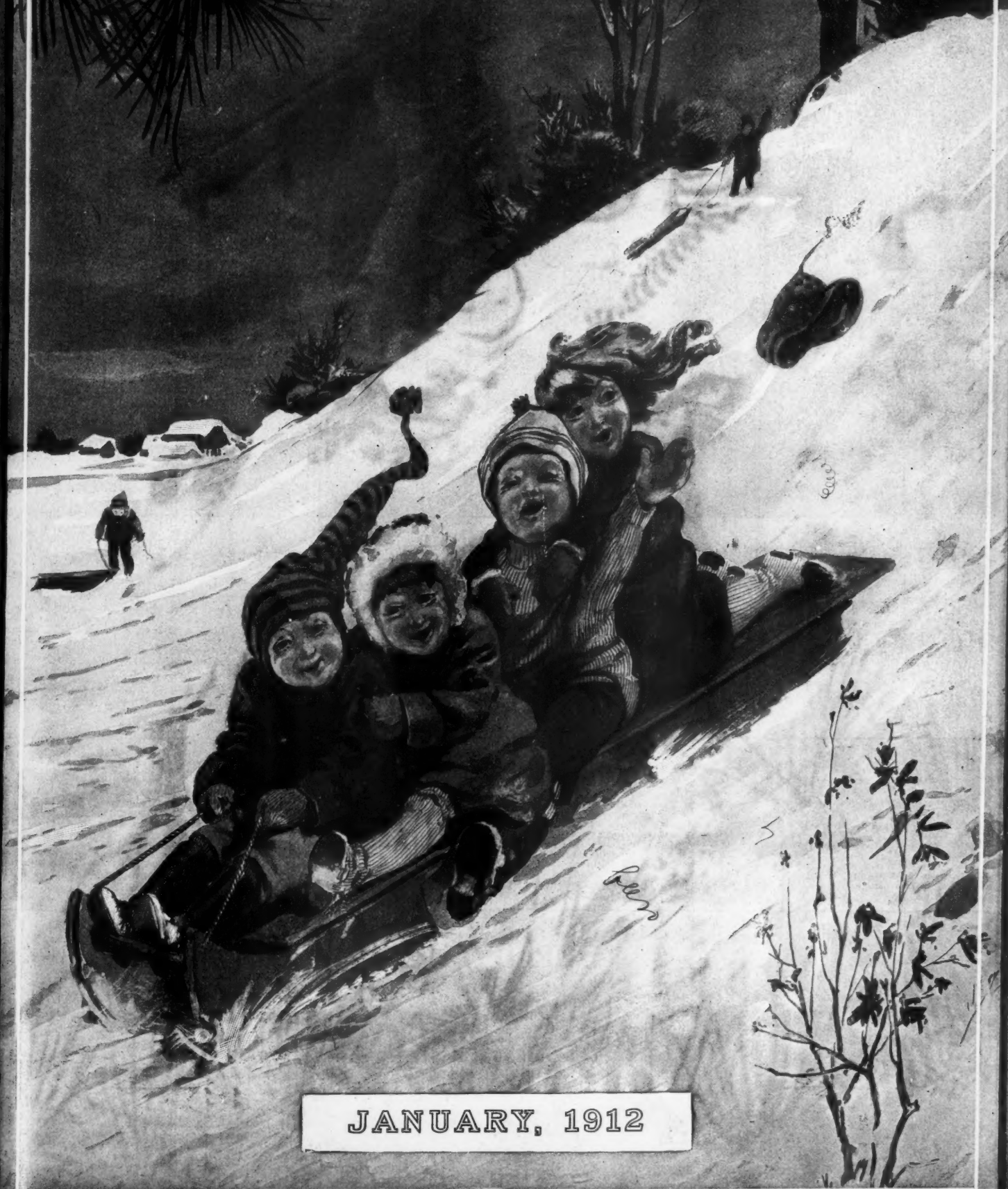


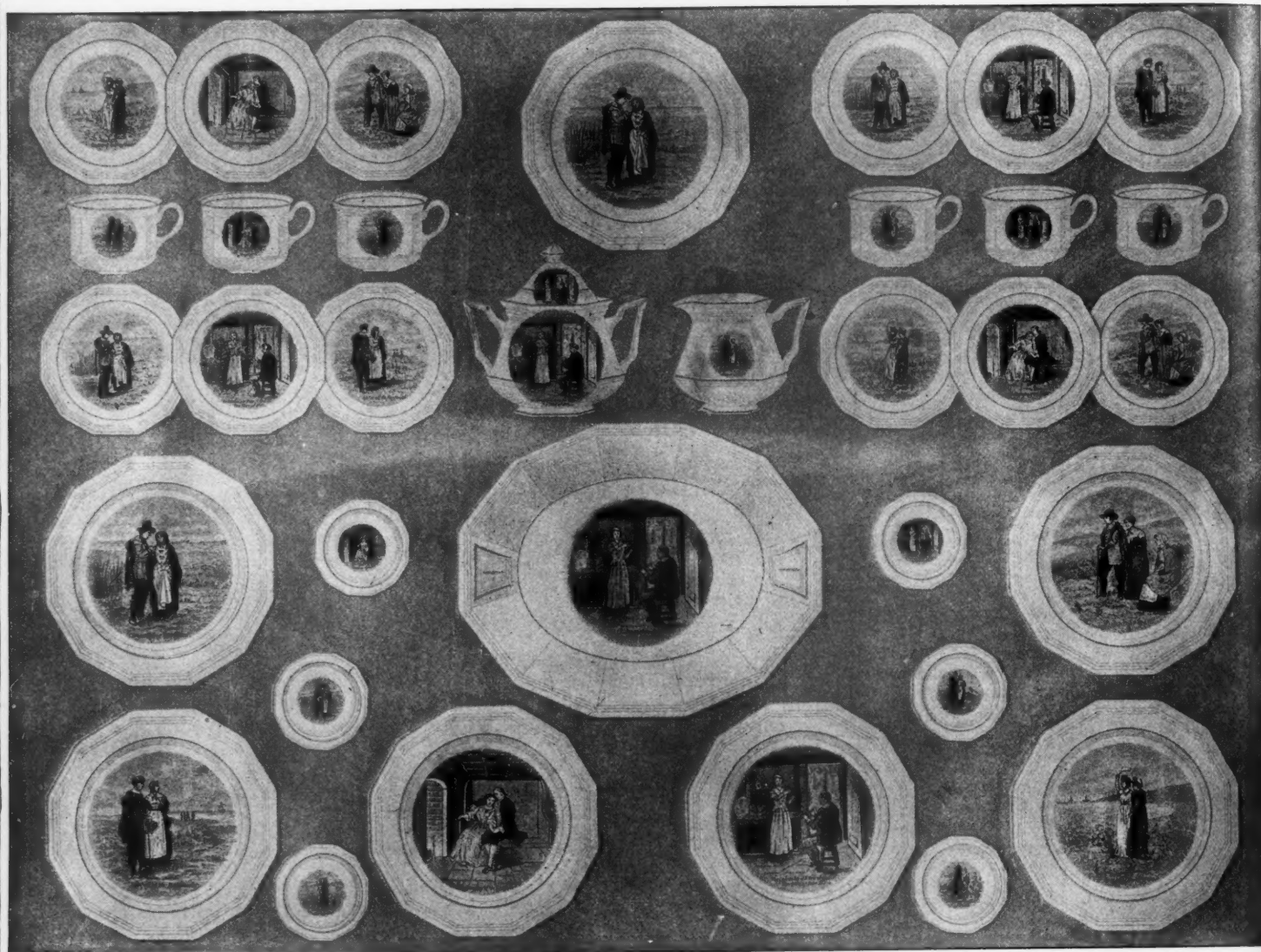
GREEN'S Fruit Grower

"A MAGAZINE WITH A MISSION"



JANUARY, 1912

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THE MAYFLOWER DINNER SET. "Ye Colonial Shape."

PATTERN USED A HUNDRED YEARS AGO (REPRODUCED).

Decoration—The decorations are those characters from Longfellow's Immortal Poem, "The Courtship of Miles Standish," the most beautiful love story in American history. The trimmings are in Imperial Blue. "Speak for yourself, John," remarked the beautiful Priscilla as she deftly wound the yarn from the hands of John Alden, who, deeply in love with her himself, was pressing the suit of his friend. What an inspiring lesson to every American is the story of these rugged pioneers.

Description of the Mayflower Ware—The illustrations used in manufacturing the first or original set of these dishes cost several thousand dollars. This ware is the celebrated "Sterling China Ware." It is snowy white and very durable. The decorations are burned into the ware and will not wear off. This elegant thirty-five piece Mayflower dinner set will be sent to your address when complying with the conditions named below as follows:

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Special Articles in This Issue

"How to Add Beauty and Salable Value to Your Farm Home."

GREEN'S FRUIT GROWER

A Monthly Magazine for the Fruit Growing Farmer and His Family

CHARLES A. GREEN, Editor

Volume 32

ROCHESTER, N. Y., JANUARY, 1912

Number 1

Home Grounds and Gardens That I Have Known.

By the Editor.

The location of the old homestead on which I was born is twelve miles south of Rochester, N. Y. Here I saw the first old-fashioned door-yard, which I will attempt to describe. The size of this garden, which was enclosed with a white picket fence, was not over fifty feet square. On the western border was a terraced wall dividing the front yard from the mixed fruit garden above. Along this wall was a hedge of June roses. Probably one of a number of these wild roses had been planted and from this one a large number of sprouts had grown up, so that in June there was a great mass of single flowering pink roses. In the center of the yard near the gravelwalk was a flowering currant, large and vigorous, which was filled with yellow flowers each spring and which bore edible black currants later on. Along this walk at intervals were paeonies and yellow lillies. One day during the noon hour at school I went out with a party to the swamp woodland back of the schoolhouse and pulled up by the roots a spruce tree not over one foot high but with wide low-branching shoots. At night I carried this little tree home and planted it in the yard I am attempting to describe, near the house. I was surprised that it should live for it was exposed for several hours in the schoolroom and while it was on the way from the swamp to the schoolhouse and from the schoolhouse to the farm home, but it lived. A few years ago I visited the old farm and found this tree dead, but it had grown to a height of thirty feet.

The size of this front yard connecting with a large and prosperous looking farmhouse was typical of the farm yards of those early days and of many farm yards of the present day. How strange that the owner of a farm embracing nearly two hundred acres should have a front yard only about fifty feet square. There should have been at least an acre of land in this front yard.

Our Fruit Garden.—To the westward from this front yard was a remarkable fruit garden, which indicates that my father must have been something of an enthusiast in fruit culture. Through the center of this fruit garden was a row of standard pears, but this was long ago before many of our best pears were known or introduced, therefore while the pears from these trees were large and beautiful, and of golden hue, they were astringent and puckered the mouth, but they were eaten nevertheless for they were the best we could secure.

On the southern border were large plum trees, bearing delicious fruit of remarkably large size, which I cannot identify as being of any varieties now known. On the western border were a number of peach trees known as Sweet Waters, white in flesh, white skinned, with a crimson blush, most delicious in quality. On the northern border was an asparagus bed that never received any cultivation. It was covered entirely with sod, on which the grass was growing freely, and yet every spring we found there large thrifty stalks of this succulent and attractive vegetable. I was told that the bed was

prepared by digging a vast trench in the bottom of which were piled stones. On top of these stones were piled old bones and other refuse, on top of this a heavy layer of manure, and on top of this eighteen inches of rich soil. No one would think of planting asparagus in this manner at the present day.

In nearly the center of the western side of the fruit garden was a large crab apple tree, which bore hard green crab apples covered with an oily substance. These apples were as bitter as the green shell of a black walnut, thus no one thought of eating them. When I read of Adam and Eve in the Garden of Eden I always in my imagination place them in this fruit garden of my childhood, and

house and barns were kept in prime condition and were painted, which was the exception in those early days. The white picket fence about his front yard was clean and continuously painted. His front yard was nearly double the size of that on the farm where I was born. Shade trees, comprising maple, horse chestnut and Norway spruce, mountain ash, and others were set on the western border and at intervals on the other borders except at the east side where there was a long trellis wall covered with grape vines, which bore an abundance of delicious fruit. No grape vines that I had ever seen received such treatment as those vines in the garden of my neighbor Myers, and the amount of fruit borne astonished me. I was fond of grapes then as I am today, and thus occasionally purchased grapes from my neighbor, since those on our place seldom ripened. I remember well the price, three cents per pound, and my astonishment that twenty-five or fifty cents did not go farther, in other words, I was surprised at the heaviness of the grape.

farm adjoining the old homestead to the south, where my brother had built a modern house. Although the land on this newer farm was fertile, for some reason the door yard was composed of clay and gravel, forming a sort of hard pan in which it was difficult to make anything grow successfully. I remember after unsuccessful attempts to make trees and shrubs grow in this yard, we dug pits three or four feet in diameter and as deep as fence posts, and drew in good soil, filling these pits, then planting the tree or shrub. If we desired to make a bed for paeonies or lillies, we would have to remove the hard gravelly soil and draw in good soil from the fields. Probably the soil from the excavation of the cellar of the house was spread over this yard, which made the soil poor. Probably the reader has noticed that adjoining the wall of nearly all houses the soil is undesirable, thus it is difficult to make vines and plants grow thriftily there unless trenches are made and good soil made to take the place of the poor soil. This condition of affairs is caused by banking

up around the house with the poor and clayey subsoil taken from the bottom of the cellar in excavating, preparatory to building the house. It is a condition almost universally existing and should explain why many people cannot make clematis and other flowering vines grow near the foundations of the house or near the porches. The remedy is to excavate holes large enough to contain three or four bushels of good soil, and to take this soil from the garden and make it take the place of the hard soil which naturally exists around the foundation of all houses.

While my father and I made strenuous efforts to make this yard of our home attractive, it was in the end a partial failure owing to the character of the soil. Thus I impress upon the readers the importance of having good soil in the yards in front of their houses, for it is impossible to secure a good lawn on hard gravelly or clayey soil, and also difficult to make plants, vines and trees thrive in such soil.

The principal shrubs growing in this home garden were roses, not at all comparable with such roses as we have at the present day, but I remember one yellow rose that was attractive, growing near the front porch. West of the house a collection of peach trees had been planted, but I cannot remember ever eating a peach from these trees. Certainly this hard clay mixed with gravel was not a good soil for the peaches and compared unfavorably with that fertile garden I have mentioned from which I gathered such delicious peaches in my childhood days.

Home Yard Fences.—I remember particularly that the fence in front of this dwelling of ours was an ordinary rough board fence, well constructed and not particularly unsightly, and yet not suitable for a door yard fence. I called my father's attention to the desirability of having a better fence in front of the house and recall investigations that I made and much time spent in deciding what kind of a fence to place in front of the house. I visited the foundries at Rochester, inquiring into the styles and expense of iron fences, which were popular in those days in the cities but found in the country only where the owner of the place was immensely rich. These cast iron fences were seemingly too expensive, therefore I thoroughly investigated a newer form of fence, made of one-fourth



Here we have an ornate garden connected with the home of a wealthy citizen. While we cannot offer this as an example of what our readers may reproduce, the photograph will give many suggestions for the laying out of lawns, drives and beds. In the foreground is a bed of ornamental grasses. Farther to the left is a large bed of roses. I cannot say that I admire formal trees such as are shown with their heads closely cropped, but they are necessary if introduced at all, since if they were allowed to attain full size they would hide the view of the flowers from the dwelling. Statuary is seen in the rear near the pergola. Such statuary is a little out of place in northern lands, for when winter comes these scantily draped figures look as though they needed some form of clothing or other protection.

when I am told of Eve's partaking of the forbidden fruit, I imagine the fruit to be from this miserable crab apple tree. There was another tree in this garden which I must not forget, and that was a large butternut tree which yielded abundantly.

The Old Orchard.—To the south of this fruit garden was the orchard proper, embracing three or four acres, but only a small portion of these trees had been grafted to improved varieties like Pound Sweet, Golden Sweet, Twenty Ounce. At the rear of the house were several honey locust trees, which were filled each season with pendant and fragrant blossoms. The only grape vine on the place was the Isabella, which seldom ripened its fruit perfectly.

In front of the house to the east was the vegetable garden enclosed with a picket fence painted red, wherein were growing an abundant supply of red currants, black raspberries and two trees of the Fall Pippin apple.

JOHN MYERS' GARDEN.

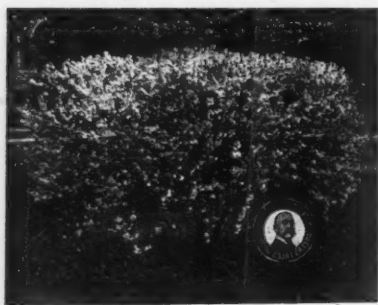
Neighboring the old homestead was the farm owned by John Myers, a Quaker, who was far in advance of his neighbors in gardening and fruit-growing. His

Since my object in telling of these old time door yards and gardens is to call attention to the meagreness of the varieties of shrubs, vines and flowers, I will say that there was but little else in this yard except an occasional rose bush and a hardy bush which I shall call snowdrop, though I forget its real name, which produced a profusion of pure white berries which remained long on the bush. This shrub was one commonly met with in the farmer's home yard and is occasionally seen today but not often.

The vegetable garden of my neighbor Myers was ever of great interest to me, for it was one of the best in the neighborhood and received unusual attention and care. The walks and beds were carefully weeded and hoed, and the radishes seemed to spring up spontaneously on every side and were remarkably tender and of fine flavor. Often I would visit this garden, on which occasions I was frequently rewarded by receiving a gift of a handful of these radishes which were very enticing to a hungry school boy.

EXPERIENCE WITH BAD SOIL IN A DOOR YARD.

After spending the early boyhood days of my life on the old homestead my father sold that farm and moved onto a



DOUBLE FLOWERING PLUM—*Prunus triloba*—Hardy, very attractive. A great improvement on the flowering almond.

inch wire bent in the form of staples and thus inserted in wooden bars. I cannot easily describe this fence but a few of them which were built over fifty years ago can still be seen scattered through the country. But even this fence was expensive and as there was some hesitation in building it, I finally tore down the old rough board fence and set the posts and rails for a low picket fence, each picket to be two inches square set close enough together so that a hen could not crawl between, every other picket being three or four inches shorter than its neighbor. This fence I think is standing at the present day. How many there were in old days who had trouble in deciding what kind of a fence to have in front of the farm house. An uncle of mine solved the problem by putting in an expensive cast iron fence, with cut stone posts low down, drilled with holes into which the iron fence was sunk and held with melted lead. He also surrounded the cupola of his house with a similar railing or fence. This fence is still standing after fifty years wear with an occasional broken section.

At the present day there are few fences erected either in village, city or country for the front yard. Hedges have taken the place of fences. No fence can add beauty to any home, no matter how expensive the fence may be, or whether made of iron, brass, granite or marble. But a hedge well planted and pruned is an object of beauty.

STILL ANOTHER HOME YARD OR GARDEN.

After my father's success as a farmer had been secured and he was somewhat advanced beyond middle age, he leased his farm and lived for a few years in the village of Rush, a little over a mile distant from the homestead farm. I was but a child then but well do I recollect every room in this house and the grounds surrounding it. Under the front part of this large village house was a cellar which had no entrance, but which could be seen from a small window at one side. This mysterious cellar was ever an attraction for me, and when in future years I read of mysterious caverns or caves in which robbers or adventurers lived for a time, I have always imagined these people to be harbored by this peculiar retreat under the house in which I was living.

In a neighbor's garden adjoining this village home I saw the first strawberry bed that I had ever seen or heard of. Almost daily I would walk up to the fence dividing our lot from our neighbor's strawberry bed and watch the development of this fruit with great interest. Finally the large berries began to ripen and to turn to that delicious crimson which is so enticing to everyone who loves the strawberry. At this period my visits to the strawberry bed became more frequent but all I ever secured from this bed was the scent of the berries, in which pastime I indulged freely.



WHITE FRINGE—A popular and much admired shrub of moderate growth and rounded form, with large, dark green, glossy leaves, and long drooping panicles of beautiful white fringe-like flowers.

Directly in front of this village house was a large golden willow tree, which I saw standing this season as I passed through the village. The door yard of this place was quite large for those times and must have embraced nearly an acre. To the south of the house about twenty feet were growing four large elm trees, each about ten feet distant from the other, forming a square. A wild grape vine in these early days had grown from the base of these trees to the topmost branches of the four elms. These four trees I saw this season as I passed through the village and they looked as natural as when I played among them fifty years ago. There were few shrubs or flowering vines in this village yard. At the rear of the house, fenced in by itself, was a large and fertile vegetable garden. The only fruit I remember having eaten from this garden was the pear, very similar in character to those puckery kinds grown at the farm where I was born.

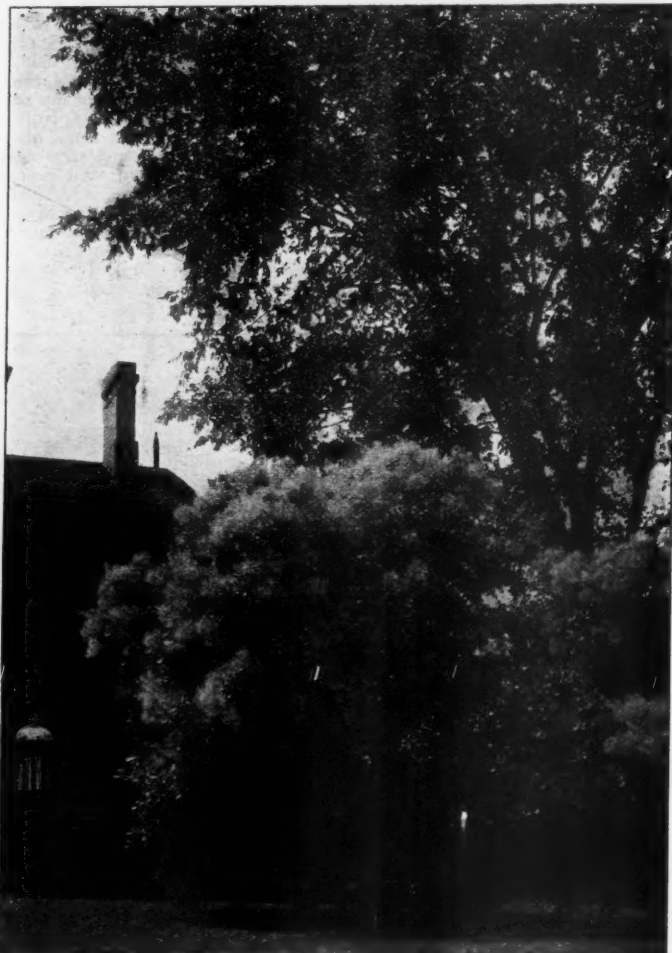
There are other farm houses which I can remember distinctly by their being associated with some great tree, some oak, maple, beech or poplar, which easily distinguished these homes from any others. Here is something which I would like to impress upon the reader's mind: how

of the elm, maple, peach, poplar, horse chestnut, double flowering thorn, cut leaf birch, cut leaf maple, and evergreens planted at suitable points.

When planning to plant do not make the old and common mistake of scattering the shrubs and trees all over your lawn. The place for planting trees is along the highway, and along the outside border of your lot or home acre. If planted on the border of your lawn, the trees should not be planted in rows but should be filled in, in a straggling way just as they would grow in a natural forest or on the edge of a forest. Your aim should be to make a sort of thicket on at least one border of your lot, trees occupying the outside space, tall growing shrubs planted next inside, and low growing shrubs or beds of flowering plants on the extreme border.

Fruit trees are ornamental if well trained and are far more desirable on the home lot than no trees at all. Anything is preferable to the barrenness of the grounds about the rural home without shade or the attractions of beautiful shrubbery and trees.

One object gained in planting shrubs, hedges and trees is to shut out disagreeable or unsightly features or views.



The bush in the foreground is the smoke tree or purple fringe. Its blossoms are the color of smoke. When at first approached one may feel that he is nearing a bonfire. It is more of a shrub than a tree. It is so different from all other shrubs it cannot fail to draw attention on the border of any lawn. It is easy to plant and succeeds almost everywhere. In the rear is seen the beautiful elm, the pride of American trees.

desirable it is that individuals should differ one from another, how desirable that one home should differ from others, and how easy it is to give a home individual character, making it different from all others by having growing the resome great tree or trees like the oak or poplar.

One Way to Make Your Place More Valuable.

By C. A. Green.

Considerable space in this issue of Green's Fruit Grower is devoted to photographic views indicating how a village or city lot or a farm home may be beautified and made more valuable and more salable by the planting of ornamental plants, shrubs, vines and trees.

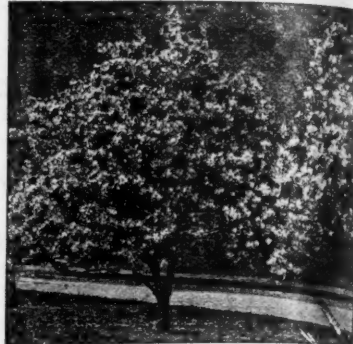
This is a new country, thus we cannot expect to find rural homes laid out or planted with artistic effect as a rule. But we are seeing more of the beautiful in rural homes each year, indicating that our people are slowly but surely waking up to the importance of planting beautiful objects not only on their grounds about their homes, but along the highways.

You need not be told that a vine or tree is a beautiful object. You know it is so, but possibly you do not realize that if your farm were offered for sale, or your town lot, it would bring far more money in the market if there were growing upon it ornamental vines, and beds filled with shrubs on the border, and trees

You can hide your barns or other out-buildings from view from the road or the house by planting quick growing trees between the house and the barns, either in the form of a hedge row or as clumps of trees. Fences are unsightly, therefore if you have on the border a fence of this character you can hide it entirely by planting trees and shrubbery in front of it.

Trees make excellent windbreaks. While they are beautiful at all times of the year, you can make the trees useful in shielding you from the wintry winds. If I could have my choice of a hedge as a windbreak, I would select a Norway spruce or arbor vitae (yellow cedar), as these evergreen trees are particularly beautiful in winter, but as it requires more time to grow an evergreen hedge, it is often thought best to plant a poplar hedge, which will grow up in one-tenth of the time and give an immediate effect after planting. For a low hedge that grows rapidly select California privet, which holds its foliage nearly all winter and therefore may be called an evergreen. A well kept hedge is a beautiful object, a thousand times more beautiful than the most expensive iron, wire or other fence could be.

An investment of five dollars, twenty dollars or forty dollars in ornamental vines, plants, shrubs and trees properly planted and cared for will add hundreds or possibly thousands of dollars to the salable value of a farm, village or city home.



MAGNOLIA—The Magnolias are foremost of flowering trees. They have no rival. Their flowers are immense in size and varied in color and often very fragrant. Their foliage are beautifully glossed and their growth in the dwarfed sorts are close and compact. They should be planted in the spring. Rochester is noted for its magnolias.

The Village Church Yard and How to Improve it.

By our Editor

My parents and my brothers and sisters were church people and did much to make the church in my native village a success. The church yard was small, but little larger than the church building itself. Far more room was occupied by the sheds and the space for getting in and out of the sheds than was occupied by the church building. These sheds were continually out of repair. They were made use of by the general public who came into market during the week days more than they were by the church people who owned them, but these people who enjoyed the use of the sheds for the horses during week days paid nothing toward keeping them in repair.

There was but little opportunity for beautifying this church yard. I remember that the same brother who dug the trees to plant about the rural school-house mentioned, planted a mountain ash in each of the two front corners of the lot facing the street. You will remember that the mountain ash is a beautiful tree both in foliage and in fruit. Immense clusters of small berries, resembling small cherries, are borne on every branch and twig and they will remain on the trees long after the leaves have fallen, and sometimes furnish food for the birds I am told. The church yard was surrounded by a fence which did not add beauty to the place.

My suggestion for church yards would be that in buying the site considerable ground should be occupied, never less than an acre in a rural village where land is cheap. The church need not be located in the immediate center of the village where the stores are congregated. It may be appropriately placed at one end or one side of the village where plenty of room can be secured. A hedge in front of the church would be attractive, whereas a fence disfigures the place. A church should be set well back from the road. The planting of the church-yard should be similar to that recommended for the home-yard, which is to place the trees not formally in rows, but scattered here and there around the border, some of the trees being only single tree deep, while at other points the trees might occupy a space of ten or fifteen feet in width, making a zig zag border round the sides and rear of the church, and inside of these flowering shrubs and the balance lawn. I would not plant trees or shrubs directly in front of the church, at least not vigorous growing ones. That which I advise in regard to building the church a little farther out was actually done in my native



PURPLE LEAVED BARBERRY—A beautiful shrub with violet purple foliage; showy, small yellow flowers, and beautiful red berries in pendulous clusters.



SCHWEDLERII—(Red Leaved Maple)—Very distinct and attractive. Foliage very showy in the early spring and summer.

village. The old church was burned, the site was sold for stores and the church built on the southern border where more land could be secured.

The old style of rural church was too pretentious. It had an immense steeple. I have not been able to find any good reason for churches having steeples, but especially rural churches. I assume that one idea was that a portion of the church should be nearer to heaven than any other building surrounding it, but cannot see any wisdom in such an idea. Steeples are expensive and the money spent on them might better be employed on making the building comfortable, well ventilated and well lighted. Such reforms as I suggest were carried out in my native village. The new church was not so tall and imposing as the old one and did not have so tall a steeple, but it was far more comfortable and far more attractive in architectural effect.

The Country School House and How Its Yard Can be Improved.

About one-fourth mile from the old farm homestead, where I spent so many happy years as a boy, was an old cobblestone schoolhouse bordered on the east by a brook, full of fish at that early day, and in the nearby wooded tract, part of which was swamp land, near which grew the wild strawberry, blackberry and wintergreen, and hid the fox, rabbit, partridge and woodcock. Back of the schoolhouse were abrupt hills, which furnished great places for riding down the slopes during winter, and in the valleys or basins water would accumulate after the ground was frozen, furnishing broad sheets of glaring ice, on which we would skate and draw our girl friends upon their sleds.

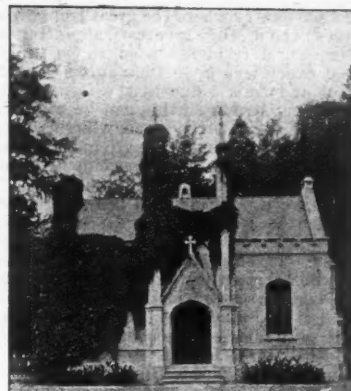
This old rural schoolhouse was about as abject, disconsolate, gloomy and jail-like a structure as could be conceived readily in the human mind. There was not a trace of decoration on any part. The roof was of shingle and at its center was a little stumpy black brick chimney, which reminded me of the black stubby pipe I have seen Irishmen smoke. The interior corresponded well with the exterior. The floor was worn so that there were hollows between the knotty portions which were too hard to yield to the tread of the children's feet. The plastering was placed directly upon the walls without lathing, which made the building damp, and the ceiling was crumbling and cracked, making it necessary in the latter years to ceil it with matched pine. The desks on both sides and rear were on a platform elevated about one foot over the main floor where the recitations were

held. The entire building probably not being over thirty by fifty feet. The platform extended around to the front where the blackboards stood. On this platform the young Demosthenes and Ciceros held audiences spellbound with their recitations. Here many times "The boy stood on the burning deck whence all but him had fled," and "the Roman soldier wept over his fair-haired child on the eruption of Vesuvius" and "the burial of Pompeii and Herculaneum," and "Mary's little lamb followed her meekly to school," etc.

The schoolhouse yard embraced about one-half acre of very poor soil. Possibly the site was chosen for the reason that it was of no value for any other purpose rather than on account of its beauty or central location. There was no fence in front of this yard. On the rear and on both sides was a stone wall covered by two rails, which the farmer who owned the adjoining land had difficulty in keeping repaired, as the boys were prone to perch upon this fence very much as swallows perch on the eaves or telegraph wires,

front of these flowering shrubs, and in front of these beds of flowers. But the teacher would have to be considered and it would be necessary to have a teacher in sympathy with the improved school grounds so that he might instill into the minds of the children respect for beautiful things, otherwise the children might do the shrubs and trees injury. It is possible to discipline school children so that they will not disturb the most delicate flower. I see evidence of this in the park near my home, which is at a central point where the band concerts are held each week during summer, filled with beds of rare flowers continually in bloom. Thousands of children attend these band concerts, and the place is open to all as a play ground and a place for picnicking, but I have never seen the slightest injury done to these flowering beds, to the shrubbery or to the surrounding trees.

I recommend that in choosing the site for the rural schoolhouse it be located near a brook, as was the schoolhouse I have referred to, for the brook was ever a



VIRGINIA CREEPER—(American Ivy)—The good hardy native American Ivy. Fine for trellises where a rapid growing vine is needed.

every respect, but they can gather some ideas by which they may not only make their farms more attractive but far more valuable and salable with but little additional expense.

On the grounds of these country clubs many beautiful oaks, maples, and elms are preserved with great care, thus becoming objects of beauty. The thoughtful farmer will hesitate to destroy beautiful trees upon his farm if he sees the effect of such trees upon the grounds of the country club.

The buildings of the country club are set far back from the highway, with beautiful stretches of lawn leading out to the front and on either side. Here is an object lesson for the farmer, who is apt to crowd his dwelling too close to the highway. How seldom one sees an attractive driveway leading to the farm house. Let the farmer observe the driveway leading to the main building of the country club. In most cases the driveway is a half circle extending from the left of the building to the porch and from thence to a point perhaps five hundred or one thousand feet distant where it connects again with the highway. Where this half circle driveway is not available owing to the lay of the land, a curved approach can be laid out extending to the house and from thence to the barns.

A RICH MAN'S COUNTRY HOME.

In almost every farming region there are one or more men of wealth who can do much toward beautifying their locality by making their dwellings and home grounds object lessons for their neighbors. We are as a race imitators. What we are, what we think and what we do is made up largely of what we see others doing. No one can drive along the highway, passing an attractive home with its driveways, its open lawn, its shade trees, its hedges, its shrubbery and flower beds, without casting his eyes that way and receiving in his mind a lasting impression. All animals are imitative. Birds imitate each other in building their nests. On inspecting thousands of birds' nests at the Smithsonian Institute at Washington, D. C., I could not help thinking that possibly early man secured his ideas of house building from the birds, for some of the birds' nests were roofed over and resembled rude dwellings such as men have built and are still building.

It is natural to suppose that a man who has spent all of his life on the farm among beautiful oaks, elms, maples, beeches, pines and basswoods, would have the greatest admiration for these beautiful objects, but such is not always the case. In many instances it is the man who has lived long where there are but few beautiful trees who, when he comes to sections



Perennial phlox. If I were to have but one flowering plant on my grounds I would choose perennial phlox. I know of no flowering plant which will make such a fine display of flowers for so long a period at so little expense and care as this phlox. It often remains in blossom for nearly two months at Green's Fruit Farm. In color it embraces almost every hue except the yellow, some being white, others bright crimson, others with blossoms of mixed colors. While the phlox may be planted in beds by itself, its bright colors show off best when placed in the foreground of the border, the border being composed of trees planted in the rear with shrubbery in front of the trees, and in front of the shrubbery perennial phlox. Once planted it will blossom for ten years, but after six years planted it is well to divide the roots and transplant again, thus making four or five plants out of one.

and the children who so often passed over this boundary fence found it convenient to take down the rails and even to remove the stones so there should be no impediment. There was not a tree or shrub or vine upon this schoolhouse lot. I remember that my brother persuaded one of our hired men to go with him into the woods and dig a dozen maple trees, which were planted in front of the schoolhouse ground and in it, but after a year or two these trees disappeared. The children had no respect for them and the teachers cared as little for them seemingly as the children.

During the latter years of my attendance, on this school ground some one built a rough board fence very high, whereas a low fence would have been just as serviceable. The entrance to the schoolhouse was over a high stile, since the builder was probably aware of the fact that no school boy or girl could be expected to close a gate. School children are too busy to attend to any little affair like opening or shutting gates.

The question of beautifying school grounds has of late years received some attention. A school ground has been discovered somewhere in the country, I do not know where, which has been planted to trees and shrubbery, but I have to confess that in my travels I have never seen such an improved school ground. How easy it would be and how little it would cost to plant on the borders of every school ground maple and elm trees such as could be found in the forest, and in

source of attraction to myself and to my schoolmates. In summer we used to dam up the stream for a short period. When the water was very low we would wade in the bed of the brook and hunt for crabs under the loose stones. For hours we would lie stretched upon our stomachs on the bridge watching our baited hooks, which were carried far under the bridge by the current, and where we would catch fish of considerable size. In winter we would skate on the ice on the brook. Taking it all and all I do not know of any more attractive feature for the schoolhouse than to have a brook nearby, but it is difficult to locate near brooks, therefore many children will be deprived of the pleasure I enjoyed.

C. A. Green.

What a Country Club or Well-to-do Farmer Can do to Improve and Cultivate the Taste of Surrounding Residents.

By C. A. Green.

In every city of importance there have of late sprung up country clubs. These clubs often own from one to two hundred acres of land used for golf courses. Attractive buildings are erected on these grounds and the surrounding acres are attractively planted, furnishing an object lesson, teaching farmers and others how to make their farms attractive, and how to lay out their home grounds and their drives. I do not assume that farmers can imitate these country clubs in



WHITE FLOWERING HORSE CHESTNUT—In early spring these trees are completely covered with flowers. We think there are but few who realize how beautiful are the flowers of the horse chestnut. When autumn comes the large red nuts cover the ground, to the delight of the children.



CATALPA BUNGEI—The Catalpas flower in July. The blossoms are showy, large and fragrant. Leaves large, heart-shaped and yellowish green. They are effective, tropical-looking lawn trees some varieties producing long seed pods, that remain on all winter. The above illustrates a Catalpa of the Chinese variety (Bungei). This is a very dense effective, umbrella-shaped tree. There are other varieties—common Catalpa; a rapid grower. Golden Catalpa another rapid grower and a purple leaved variety with dark purple leaves.

of the country where the great trees grow, gives them the greatest appreciation. Thus rural residents need to be taught that every tree upon their farms is beautiful and adds value to the farm. Such an object lesson as this can be given by the man of wealth and taste who surrounds his home with extensive grounds and has growing there beautiful specimens of our forest trees and our hardy shrubs.

I have a painting of a beautiful flower garden located in an open sunny spot surrounded by big, low-branching forest trees. Through the center of this picture is seen a distant vista of a tree clad valley. I asked the artist who painted this picture where he found such a beautiful scene. He said that he discovered this beauty spot in Massachusetts on a wayside farm during one of his summer vacations. He said that a few years after the painting was made he received a letter from the farmer telling how the farmer had greatly beautified the scene the artist had painted. Later on the artist visited again the scene which had so entranced him, and which he had reproduced on canvas, and to his horror found that the owner had cut away the beautiful low branches of the forest trees, thus greatly marring the beauty of the scene.

Here is another instance of the lack of appreciation of trees by some farmers: Near the farm home where I spent my boyhood days and on the western border on the shores of Honeoye Creek was a beautiful maple grove, a remnant of the primeval forest, embracing two or three acres. The site of this grove was on a beautiful hill, the southerly side being a steep slope towards the creek below, thus the land was of little value for cultivation. This grove was a place for picnics. Often the village pastor would hold religious services in this grove during the summer time. Here the squirrel and chipmunk built their nests and the wild birds gathered to sing at morning and evening. Imagine my sorrow on returning to this scene after an absence of several years to find that this grove had been destroyed by the woodman's axe and every vestige of it had been turned into ashes.

Protective Wash for Trees.

Complaints of damage to orchards and various other crops by rabbits continue to be received. Experiments were continued during the last year with a view to the discovery of a protective wash for fruit trees, and excellent results were obtained with lime and sulphur wash, well known as a remedy for the San Jose scale. The wash can be made in quantities very cheaply, and it seems to protect fruit and other trees perfectly from the attacks of both rabbits and mice. It is also durable in effects, one liberal application lasting all winter. Should further experiments confirm the efficacy of this wash as a protection for trees against the attacks of small rodents, an important problem will have been solved, as the annual destruction of orchard trees by rabbits and mice reaches large proportions.—Secretary of Agriculture, James Wilson.

WORKS WITHOUT FAITH

Faith Came After the Works Had Laid the Foundation.

A Bay State belle talks thus about coffee:

"While a coffee drinker I was a sufferer from indigestion and intensely painful nervous headaches, from childhood.

"Seven years ago my health gave out entirely. I grew so weak that the exertion of walking, if only a few feet, made it necessary for me to lie down. My friends thought I was marked for consumption—weak, thin and pale.

"I realized the danger I was in and tried faithfully to get relief from medicines, till, at last, after having employed all kinds of drugs, the doctor acknowledged that he did not believe it was in his power to cure me.

"While in this condition a friend induced me to quit coffee and try Postum, and I did so without the least hope that it would do me any good. I did not like it at first, but when it was properly made I found it was a most delicious and refreshing beverage. I am especially fond of it served at dinner ice-cold, with cream.

"In a month's time I began to improve, and in a few weeks my indigestion ceased to trouble me, and my headache stopped entirely. I am so perfectly well now that I do not look like the same person, and I have so gained in flesh that I am 15 pounds heavier than ever before.

"This is what Postum has done for me. I still use it and shall always do so." Name given by Postum Co., Battle Creek, Mich.

"There's a reason," and it is explained in the little book, "The Road to Wellville," in pkgs.

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

The Value of Fruit Trees Planted Along The Highway And The Profit Therefrom.

By Our Editor.

The Germans are a thrifty people who will thrive where many others fail. Real estate men in Rochester, N. Y., feel that if they have sold a house to a German family, no matter how poor they may be, the probabilities are that the payments will be made promptly and that as the years go the home will be

and carrying off the fruit, therefore they are not much more likely to steal that along the roadside than in the adjacent orchard. But if there should be existing a fear that the fruit along the roadside would be stolen, the safest fruit to plant there would be the cherry, a fruit which could not be carried off in large amounts at night or very quickly in the day time.

I have referred before in Green's Fruit Grower to nearly a mile of highway which was planted by a neighbor many

most other trees. The pear, plum, apple and cherry are particularly adapted to such a location as the roadside.

Bear in mind that the soil close to the fence line on either side of highways is far more fertile than the average farm soil, for the reason that this roadside soil has not been cropped and has been accumulating fertility for many years. If there is a stone wall along the roadside this wall answers the place of a mulch, keeping the ground moist and cool, a good place for the roots of the fruit trees to gather nutriment and moisture.

When planting the roadside to fruit trees I would not crowd them too closely together. A common mistake in planting forest trees along the highway is that they are often planted too closely, thus shutting out the sunshine and wind, preventing the road from drying after heavy rains. Forty feet apart for apple trees, thirty feet apart for plum and cherry trees is close enough for the borders of the highway.

Years ago there was difficulty in succeeding with fruit trees planted by the roadside owing to the fact that cattle were pastured along the highway. In New York state, and I assume in many other states, laws have been enacted prohibiting the presence of cattle on the highway for the purpose of pasturing, thus at present many farm fences in New York state are no longer necessary along the roadside.

The owner of a farm has a legal right to plant trees of any kind along the roadside. In fact he owns the land occupied by the highway if he owns land on both sides of the highway. If he owns land on only one side of the highway, he owns half of the road. He has a legal right to sow grain crops by the roadside but he cannot obstruct the roadway.

Pruning—On mild days it is a good plan to go into the orchard and do some pruning. This is work that requires carefulness. Says American Cultivator. The first thing to do is to cut out all dead wood then where limbs rub against each other the least desirable one should be removed; then look the tree over by standing on the ground and see if the top is too thick, but do not prune too severely.

How Many Trees to an Acre.

Distance Apart.	No. Trees
12 x12 feet.....	302
13 x13 feet.....	257
14 x14 feet.....	223
15 x15 feet.....	193
16 x16 feet.....	170
16½ x16½ feet.....	160
17 x17 feet.....	150
18 x18 feet.....	134
19 x19 feet.....	120
20 x20 feet.....	108
25 x25 feet.....	68
30 x30 feet.....	45
33 x33 feet.....	40

Scraping Bark from Trees.

As to the advisability of scraping rough or shaggy bark from apple trees, the State zoologist of Pennsylvania has the following to say:

"This depends upon the conditions in general. I would advise such treatment, especially for the rough, scaly bark of old trees; but if it be bark that has been roughened by the injurious action of oil sprays, or by burning with fire or some other injury, I am satisfied it would be wrong, because this is the tender bark beneath just what a seal on an animal is to a sore which it is protecting. Therefore, if the bark beneath is tender, so that it would be injured by being scraped, it is best not to do it. In the case of an ordinary healthy tree it is certainly best, but at injured places, such as above mentioned, it is advisable to scrape gently, if at all. On an old tree one can not apply enough pressure with a short handled hoe or bark scraper to do any injury, and this will remove many insect pests, such as codling moth, woolly aphis and certain hibernating creatures, and expose scale insects and other pests to the action of the weather, and of the insecticides to be applied before the leaves appear."

Value of A Separator.

No dairyman can afford to be without some good separator. A separator will remove practically all the butterfat from the milk while the old method of skimming may leave as much as twenty-five per cent. of all the butterfat in the skim milk. Butterfat is certainly too expensive for hog food. Any good hand separator will leave less than five one-hundredths of one per cent. of butterfat in the skim milk and thus will effect a saving of from \$4.50 to \$8.00 per month per cow over the old fashioned gravity systems of creaming. In addition to this it is well to bear in mind that with a hand separator a richer and better cream can be skimmed and that the skim milk can by this system be fed immediately while still in a warm sweet condition.

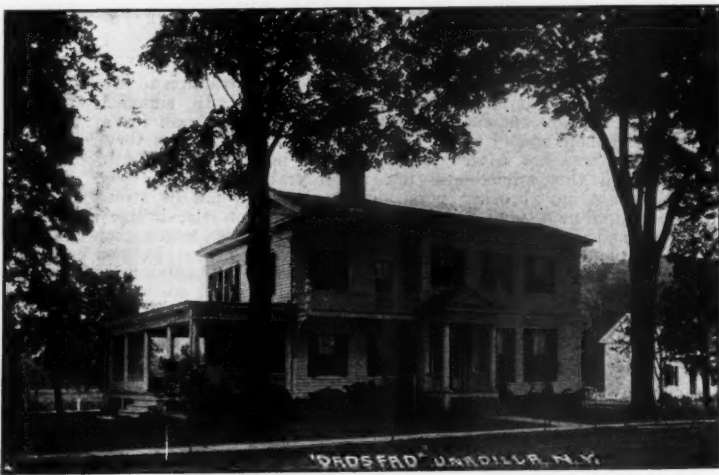


THE LILAC.—With this white lilac is introduced another view of Highland park, which has one of the finest collections of lilacs in the world. When these lilacs are in blossom thousands of people come daily to see the marvellous show of flowers. Upon the hill side are hundreds of lilac bushes in one compact mass. Nearby is a collection of every known variety of the lilac, embracing hundreds of different color or character. No flowering plant is better known than the lilac. There is scarcely a farm home, no matter how lowly, that has not a lilac bush. It is one of the most attractive and fragrant of all flowering plants. Of late years superior varieties have been secured far in advance of the old kinds so often seen in rural districts. The lilac is easily planted and thrives almost everywhere. It may be planted in the form of a hedge or in groups on the borders of the lawn. The above photograph indicates how clumps or beds of shrubs and low growing trees may be introduced on the borders of the lawn with notable effect. Please study the beds shown in the background of this photograph and their effect.

paid for. I am not surprised therefore to find in Germany the roadsides planted to the plum, cherry, pear, apple and other fruits, which bear abundant crops and aid materially in the revenue of the owners of the land adjoining.

Much can be said in favor of planting trees on either side of the highway. No one can deny that fruit trees are an ornament. They beautify the landscape. A highway lined with fruit trees is far more attractive than a highway

years ago to cherry trees close to the highway fence on either side of the road. These cherry trees received no cultivation. The first year or two each tree was mulched by having a forkful or two of straw litter thrown around the surface of the soil as far as the roots extended. The trees thrived and were remarkably productive. No one passing that way could fail to observe this unique method of cherry growing. When the cherry trees were in blossom they



I send you this picture of my home which has 1½ acres of land with it. The name "Dadsfad" is a suggestion of my children.—Fred T. Sherman.

without any kind of trees.

If the highways of New York state were all planted on either side with fruit trees, the value of the fruit grown thereon would amount to possibly fifty million dollars each year.

Those who have experimented in planting fruit trees in the roadside have found that these fruits are not seriously molested by thieves or by people driving that way. If thieves desire to steal fruit, there is no difficulty in their jumping over the fence into neighboring fields

were remarkably attractive, and no less attractive when the bright red or yellow fruit was ripening. Here was a continuous object lesson in fruit growing, teaching hundreds of thousands of passers by how productive the cherry tree is and how beautiful and how delicious the fruit and how acceptable to the housewife. While peach trees might produce well by the roadside, I would not advise planting them there, not dwarf pear trees, for peaches and dwarf pear trees need more frequent cultivation than

If you house a view your evening cannot without for the full is valuable financial man having his love farm of lake of Later s to pay ful site ways in financial ciation This the east As I a rise from gimmer ber land big oak wise ma grow in every d beautiful tiful the

Fe Conce fertilizer Kansas aged sa contains two per at curre foods m five cent ton. Be by reason acid con some valu which po of the sol cal action mus in th The po soluble fo comparab

Pear Bl Prof. W principal that the spread of know. H ers would disproved charge. S But wh honey bee fact remain insects is they are only carry plant to p but they necessary blossoms, onstrated there can b It has happ growers ha bees in the insects did some insta keepers to result that off alarmi enough to again. So, what Waite may will not be the bees from The remedy here. It is growers th bees from spread it—o in any man out careful and consist in check. U will continu orchards.

Will the tendency of together like point where escape from lation that g character an rendered? T get themselv some of the hibits at the Garden. It i hibit was a s success of "gr a combination given district mon, buying a playing a skill

Look for A Beautiful Location For Your Home.

By C. A. Green.

If you are building, try to locate your house where you can get every morning a view of sunrise and every evening a view of sunset. Each morning cast your eye towards the rising sun and each evening toward the setting sun. You cannot do this for many months or a year without gaining a love and appreciation for the beautiful. Love for the beautiful is not an impractical thing. It is a valuable asset which may lead to your financial gain in many ways. Many a man has been made wealthy through having love for the beautiful. Possibly his love of beauty has led him to buy a farm overlooking a beautiful river or lake or harbor scene on the seacoast. Later some wealthy man may be willing to pay a fabulous price for this beautiful site. There are hundreds of other ways in which a man may be advanced financially by having a taste or appreciation for the beautiful.

This morning my wife called me into the east room to see a beautiful sunrise. As I awake each morning and before I rise from my bed I see this sunshine glimmering through a small piece of timber land and through the branches of the big oak. How true is the saying of some wise man that if we would continue to grow in mental attainments we must see every day a beautiful view of nature, a beautiful painting, and must read a beautiful thought well expressed.

Fertilizing Value of Ashes.

Concerning the use of wood ashes as fertilizer, Prof. A. M. Ten Eyck, in a Kansas Station Bulletin says: An averaged sample of unleached wood ashes contains seven per cent. of potash and two per cent. of phosphoric acid, which at current retail prices of these plant foods makes wood ashes worth about five cents per hundred pounds, or \$9 per ton. Besides the actual fertilizing value, by reason of the potash and phosphoric acid contained in the ashes, there is some value in ashes simply from the power which potash has to make the nitrogen of the soil available for plants by chemical action on the organic matter and humus in the soil.

The potash in ashes exists in a readily soluble form, and is thus immediately incomparable.

Pear Blight and the Honey Bee.

Prof. Waite, who is recognized as the principal authority on pear blight, says that the bees are responsible for the spread of the disease—and he ought to know. However, beemen and fruit growers would be glad to have his assertions disproved and the bees cleared of the charge. Says California Fruit Grower.

But whether pear blight is spread by honey bees or by some other agency, the fact remains that the presence of the little insects is necessary to fruit growers if they are to have crops. For they not only carry the germs of the blight from plant to plant, as Prof. Waite asserts, but they also carry the pollen which is necessary for the fertilization of the blossoms. It has been pretty well demonstrated that where there are no bees there can be no fruit raised, or very little. It has happened more than once that fruit growers have objected to the presence of bees in their orchards, fearing that the insects did damage to the fruit, and in some instances they have caused bee keepers to remove their bees, with the result that the production of fruit fell off alarmingly and the growers were glad enough to have the bees brought back again.

So, whatever Mr. Herron and Mr. Waite may think about the matter, it will not be necessary or wise to remove the bees from the vicinity of the orchards. The remedy for pear blight does not lie here. It is rather in the hands of the growers themselves. To prevent the spread of blight, if they do spread it—or to prevent its being spread in any manner, the blight must be cut out carefully. If this done properly and consistently, the blight can be held in check. Unless it is done, pear blight will continue to work its ravages in the orchards.

Will the Farm House Pass?—Has the tendency of human beings to huddle together like sheep in a storm reached a point where even the farmer cannot escape from it? Are the privacy and isolation that give the farm house dignity, character and independence to be surrendered? These questions naturally suggest themselves in view of the nature of some of the comments on one of the exhibits at the land show at Madison Square Garden. It is stated that the Utah exhibit was a striking demonstration of the success of "group farming." This means a combination of all the farmers of a given district to carry on farming in common, buying machinery together and employing a skilled superintendent.

APPLES IN VERMONT. Greatly Increased Interest in Orchard- ing—Many Successful Growers.

It is only within a very few years that fruit growing in Vermont has received much attention. Scattered over the state, particularly in the Champlain Valley, were orchards ranging in size from one hundred to one thousand or more trees. A great many of them were uncared for and bore a profitable crop only occasionally. Says C. J. Wiltshire, Boston in N. Y. Tribune. Thirty years ago the crop of a magnificent orchard of five hundred trees in the town of Sheldon for the most part rotted on the ground, because the cost of picking, barreling, shipping and selling was greater than the

almost any conditions has been ably proved by a couple of experiments with scrubby little native trees in the White River Valley. Four years ago such a native tree, growing in sod land, was grafted with a McIntosh Red scion. This year it bore twenty-eight beautiful apples, and the height of the single graft left to form the top is now over ten feet. Another grafted to St. Lawrence is eight feet high, and the graft is six and one-half feet in diameter across its spreading top. Greenings, Northern Spys Fameuse, St. Lawrence, McIntosh Reds and any of the early varieties do well in Vermont.

In the orchard of C. T. Holmes the crop was about 6,700 barrels. This orchard



In the distance at the right in the above photograph is a golden willow, a beautiful tree which should be more often planted to ornament the home grounds. The Golden Willow is a tree which will flourish anywhere, on low wet soil or on high ground. It is easily transplanted and is a rapid grower. Notice the pendant or weeping foliage on this golden willow. Its bark is bright yellow hence its name. Do not fail to plant a few of the golden willow. In the foreground at the left is a plant of the Golden Leaved Elder. Any kind of wild elder is ornamental. Its blossoms are marvellously attractive and its fruit is beautiful and useful. There is a wild elder that bears red berries said to be poisonous. The golden elder shown in the photograph has foliage of a bright yellow color. In the middle background is a large apple tree and further at the rear is a specimen of the cut leaved weeping birch. This residence with its beautiful pond is located on one of the leading avenues of Rochester, N. Y. There are many farm homes which could be beautified at little expense by a pond, caused by damming a small stream. Such a pond in addition to its beauty will supply an abundance of ice for storage and trout or other fish for the home table. In most instances the pond should be deepened before the dam is built.

price the apples would bring. It was a full fruit year, and there was no sale for them even the nicest Baldwins. Greenings and Northern Spys. As a consequence of such conditions this and other beautiful orchards were left to themselves. If they bore a crop of fruit, and it would sell for enough to pay for handling, it was harvested; otherwise not. The bearing was very uncertain, and a large part of the product was inferior in quality, notwithstanding that most of the trees were of good varieties. The

is largely of Greenings and numbers 3,000 trees of bearing age. There are also about twenty acres of young trees recently set. This orchard has broad spaces between the trees and all the trees are very symmetrical. There is also an old orchard set more than forty years ago and not considered of much account until recent years. It was then thinned by cutting out about half the trees, pruned, sprayed and generally renovated. The land was ploughed and heavily fertilized. This fertilizer comes in carload lots from the



View of a parklike street made beautiful by the planting of the maple or elm. In the foreground notice the beautiful hedge composed of dwarf berberry (Berberry, Thumbergi). This hedge plant is naturally a low grower easily kept within bounds. This berberry hedge is covered with beautiful red fruit remaining on the plants during winter. The foliage as autumn approaches is a beautiful crimson color.

impression prevailed that Vermont was not adapted to fruit growing.

Within a decade a great change in conditions has taken place. At first one or two, later many others, came to believe that these neglected orchards could be made to yield more profit than all the remaining acres of the farm. Working upon this theory, they have ably demonstrated the fact that Vermont soil will produce fruit that is unexcelled in flavor, size and coloring, and that the same care and cost in raising, picking and packing will make them as profitable as the much famed apples of the Pacific Slope. These Western apples, while very attractive to the eye, are lacking in the zest and exquisite flavor of Eastern fruit. That apple trees will grow here under

stockyards. Buckwheat is sown and is allowed to lie upon the ground as a mulch. Some lime is used. An offer of \$50,000 did not tempt Mr. Holmes to sell.

Mr. Drew, of Burlington, has a fine orchard of Baldwins, and H. H. Hill, of Isle La Motte, is another prominent apple grower. The Orchard Farms, owned by L. B. Lord, of Burlington, produces Greenings, Baldwins, Talman Sweets and Russets, which he is selling direct, f. o. b., for \$3 for firsts and \$2 for seconds. This saves any shrinkage through storing and gives him quick returns.

It is estimated that the acreage in Vermont in apples has doubled in the last three years. There has been a great awakening on the orchard question. Orchards are sprayed, pruned and gener-

ally well cared for, where three years ago they received no care at all. That this pays is well shown by the difference in price of fancy firsts and the lower grades. The fancies retail all the way from \$5 to \$10 a barrel, with wholesale prices from \$3 to \$6, while seconds are a third off this price, and lower grades still are a drug on the market. Properly cared for orchards have only a small number of anything except firsts and fancy.

More Apples Needed on the Farm.

One of our horticultural exchanges declares there will always be markets for apples. There never can be an over-production of a good article of this fruit, and that it is impossible at the present time to produce the quantity of good apples needed to meet the demand. This is made more positive by the fact that England, Germany, France, Denmark, Australia and the far east are now calling for apples from the orchards of Washington, Idaho, Oregon and British Columbia.

This year there were large crops in the orchards of the Northern Pacific slope, but in the western and eastern States, and the States of the central valley the production was light. The fact is, orchards have been neglected, and in many cases the trees have been allowed to die or become worthless for lack of attention. The annual production in this country is actually falling off. The crop of 1896 was 69,070,000 barrels, or 177,675,000 bushels. Two years later, in spite of the boasted improvements in orchard culture, the total product was 25,000,000 barrels, or 62,500,000 bushels.

We may well appeal to farmers to give their orchards more attention. We admit that there have been disappointments in marketing, and resulting discouragement, because fruit had been shipped to glutted markets and allowed to become worthless there, and to avoid that condition much has been allowed to rot in the orchards; but even at those most discouraging times there have been places not far distant where there were people hungry for the apples that were perishing, and who would readily have taken them at fair prices had they been brought within reach.—Up-To-Date-Farming.

Birds and Fruit Trees.

J. Warren Jacobs declares that, properly encouraged, birds will save the fruit grower the annoyance and expense of spraying his trees with poisonous liquids. In the Gleanings referred to Mr. Jacobs spoke of the remains of small beetles found in the nest rooms of a martin house, after the young birds had taken their flight. Similar beetles were found last summer infesting the bark of a young apple tree and were sent to H. A. Surface Economic Zoologist of Pennsylvania. He identifies them as shot hole borers, or bark beetles, and declares that the destruction of these beetles by the martins is an important point in behalf of bird protection and especially martin colonization.

In Mr. Jacobs' supplement are given figures of large fair apples and plums, uninjured by insects, grown on his place where all birds are protected, and the author believes that the freedom from injury of these fruits is due to his efforts in bird protection.

Mules on the Farm.

Written for Green's Fruit Grower by Frank I. Hanson, Mass.

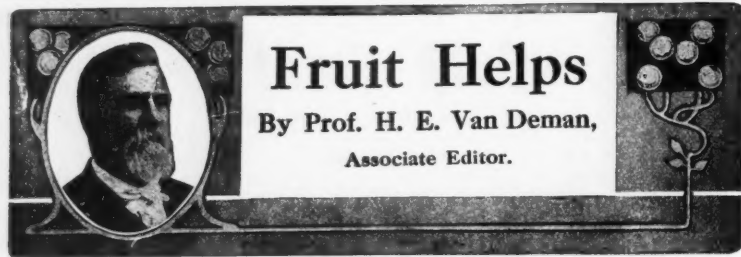
Mules are faithful, good-working servants, and are worthy of a place on any farm. In many respects they are preferable to horses. They are stronger in proportion to their weight, and they handle themselves excellently in rough places. They are very hardy, wintering on less grain and coming out in good condition for the strenuous spring work. They are much less susceptible to disease. They break well and are not so nervous.

Their disposition has been greatly misjudged, their reputation for stubbornness and kicking being more fancied than actual. They are naturally patient and obedient, and I know of no animal that responds to kind treatment more readily. They are certainly worthy of a trial where efficient service is desired at a minimum of cost and care.

An Enemy of Apple Trees.

Probably the most destructive enemy of all the pests that infest fruit trees is what is known as the case-bearer. It is very manifest this season, and from present indications its ravages upon apple trees bid fair to very materially shorten the crop of apples next fall.

This comparatively new destroyer is a minute insect that feeds upon the foliage, causing the leaves to discolor and dry up. It is so potent in this country that large orchards in some instances are almost denuded, and present the appearance of having been run through by fire.



Fruit Helps

By Prof. H. E. Van Deman,
Associate Editor.

Beautifying Country Homes.

The country is beautiful at all times of the year everywhere. Some think springtime the most beautiful of all the seasons, when the trees and fields are changing the gray and brown of winter to living green and when the early flowers are unfolding their glories. The growing wealth of summertime has its beauties but, autumn surpasses all in gorgeous coloring, as the leaves turn from green to golden yellow, pink, scarlet and deepest crimson, with all imaginable variations. When the snows of winter cover the bare earth, the buildings, fences and all with a mantle of purest charity, and the trees bend their branches under the same gentle burden, there are scenes of wondrous beauty that claim our profoundest admiration. These are some of the treasures of country life that nature bestows upon us "without money and without price." The city folk leave their walls of brick and stone, their steaming pavements and little patches of green to enjoy for a time the greater and grander every day blessing of rural life. If they appreciate them more than those of us who have them before us daily and hourly it is not to our credit, and with many country people I am sure that this is not true. The residents of the country love their homes for the most part and enjoy the rustic freedom of their fields and forests and their quiet life.

But I think we do not fully appreciate the grandeur of our surroundings, nor give sufficient thought and time to the details that make up the grand total of our existence. We do not see the sweep of the skyline nor notice the violets blooming along the fence rows; we do not heed the singing of the birds and lift our voices with theirs in praise to the Creator of earth and sky. We do not see in the tiny brooks that have their sources in the cool springs from which we drink at harvest time the great rivers they unitedly make, flowing into the mighty oceans that bear the commerce of the world. The clouds that float above us are God's umbrellas to shade us from the scorching sun at noontime, but we often only fear they may bring rain to spoil our new made hay. Verily, we do not fully appreciate our countless blessings nor always make proper use of our natural privileges.

WHAT A FARM HOME SHOULD BE.

A farm home should above all things be practical. It should be a place where a living is made for the farmer and his family. But it need not be altogether planned and conducted for mere subsistence and money making. It should be convenient and enjoyable and there is a poetical side to country life, or should be, and if it is not seen in some measure, the farmer is blind to his own interests and those of his family in whole or in part, as the case may be. Utility and beauty are not, or need not be, either strangers or enemies. Thousands of country places as they are seen would seem to prove that they are both. Such places are misfits in the world of rural life. In very many cases the ease and cheapness with which changes could be made that would be delightful and economical is not at all understood. And those who are planning the establishment of new country homes, where there is opportunity to carry into effect modern ideas will do well to carefully consider the whole subject before making and laying out the plans.

PLANNING A FARM.

If a good building site can be found near the center of the work to be done, the buildings should be located there. The economy of daily or hourly travel to and from the fields or orchards being shortened as much as possible is a point that needs no discussion. The shorter the distance, the less the cost of the product. The location should be on a slight eminence for the sake of good drainage and free circulation of air. And a commanding and pleasing view is very desirable. It adds dignity and grace to the whole situation and has an inspiring effect upon the children born and reared at such a home. And if native trees and shrubbery are there, they are a very valuable addition, for they insure shade and wind protection at once and will save time as well as money in ornamenting the homestead. A house in a grove of stately shade trees is always not only comfortably situated but it is lovely in its aspect. I have helped locate several

such for others and three of my own I have worked out of the wild forest. It requires good judgment and often great care and constant watching to prevent the destruction or injury of the trees and shrubs to be preserved until after the clearing and building are done. It is best to enclose them with fences or other substantial material until all danger is passed.

A building site should be reasonably near a public road but my preference is for a short distance from it, with a private drive to the homestead. This gives pleasant seclusion and better access to



Home of C. A. Green. This house is located near the center of about four acres of land on the suburbs of Rochester, N. Y., near Highland park. The object in photographing this house is to show the ornamental effects of climbing vines. The large vine over the side porch, climbing up to the roof of the main part of the building, is the trumpet vine. This is a rapid growing vine and if left to itself would cover the entire house, roof and all. In mid-summer it is filled with long and pendant purplish blossoms. At the porch on the left has been trained a single branch of a Worden grape vine located at the rear of the house. This grape vine is vigorous enough to cover a large portion of the house if it were allowed to do so. The arm of the vine over the kitchen porch is filled every year with clusters of grapes but they are always picked entirely by the newboys or boys who deliver groceries. These grapes are too convenient to last long, and scarcely ever get ripe before they are picked, but the vine remains. As no one carries that off it is always a thing of beauty.

the fields from a common center than if immediately on the roadside.

LOCATING FARM BUILDINGS.

The arrangement of the dwelling and farm buildings with relation to each other is a matter of much importance. The stables and stock lots should be in the direction from the house towards which prevailing summer winds blow. This insures the carrying away from the house the disagreeable and unwholesome odors that are a necessary result of keeping farm animals. Their distance apart must be regulated by their use and to some ex-



View of a corner of the home grounds of the Editor of Green's Fruit Grower. The Editor and his Superintendent are seated on a bench in the foreground talking over business affairs. The central bed consists of the beautiful ornamental grass called ostrich plume. The beauty of this grass is unexcelled. It grows to the height of about five feet, its blades bending over gracefully almost to the earth. As winter approaches it sends forth blossoms resembling the ostrich plume, hence its name. These blossoms or plumes may be kept in vases all winter and are highly ornamental. At the right of the photograph notice the line of trees planted at the outer edge of the lawn, the shrubs planted in front of these trees, and in front of the shrubs flowering plants, a method of planting which I have suggested several times in this issue. The tall tree is the Lombardy poplar. No place is complete without a few of the poplar trees, which give the grounds character. Back of the poplar are maples bordering the highway. At the left are groups of shrubs and the corner of a flower bed. Notice the wide expanse of lawn which is only partly shown. There is actually near the figures seated almost an acre of open lawn. This open space would be marred or disfigured if occupied here and there with trees. Notice that the trees should be gathered in groups on the borders or at other points and not scattered about promiscuously.

tent by the lay of the ground. Danger of catching fire, one from the other, in case of accident, should not be overlooked.

PROVISION FOR WATER.

Plenty of good water is an essential on any farm and must be planned for from the start. If a running stream through the farm and close to or between the buildings can be had this is of almost priceless value, especially if it has its source in a forest near by or some other place where there is nothing to contaminate it. Good Springs are of untold value and if one or more are higher than

the buildings it is an easy matter to pipe the water into them. This I have done at small cost. From wells or other sources lower than the building site water can be forced there by a hydraulic ram or a gasoline engine at small cost. Cisterns are entirely practical in all places except the arid regions, and if properly caught and stored no water is superior to that which comes directly from the clouds.

ORNAMENTAL PLANTING.

All country places and above all, the homes of fruit growers should be tastefully planned and decorated with trees and shrubbery. A treeless country place is desolate and dreary and children can never look back to it with much pleasure. Ornamental trees and shrubs add material money value to any piece of property. In some cases they would be considered worth more than the buildings by an appreciative purchaser. Buildings may be made quickly but trees and other beautiful living things take time to attain size and graceful proportions. Never cut down a tree, bush or vine without thoughtful deliberation. Nature's work of centuries may be destroyed in an hour.

CONCLUSION.

Whatever is done in planning changes in country homesteads or making new ones, try to follow the suggestions offered for making them attractive. Spare as many of the beautiful things that nature has planted as may be woven into the plan. Be merciful to them and never rash in cutting them down. Install good water systems and other modern conveniences and let the useful and beautiful dwell together in harmony.

H. E. Van Deman.

Answers to Inquiries.

W. M. B. of Washington, D. C., asks if seedling apple trees can be grown from the best selected seeds and if the young plants are grown in the best manner and good fruit be depended on from them?

Reply:—No, emphatically no! This has been tried many thousands of times, as the old seedling orchards that were planted long ago prove. And there have been and now are experimenters at work on this very problem with the apple and other fruits as well and in all cases the per cent. of trees obtained have produced fruit of most variable character and the most of it so lacking in good qualities, compared with the varieties from which the seed was saved as to be unworthy of a second thought.—H. E. Van Deman.

An inquirer near Petoskey, Michigan, wants to know if the Wilder Early pear will succeed on soil there that is of a gravelly and sandy nature, some ten feet higher than Lake Michigan.

Reply:—It is likely that there will be no serious trouble in growing this pear trees, although the low situation may be frosty at times. This will depend very largely on the relation of this particular place to other higher land and the opportunity for air damage.

Prof. H. E. Van Deman.—What is the trouble with my grape vines. I don't get many grapes, some of the vines I got fourteen or fifteen years ago, Concord, Moore's Early, Brighton, Delaware, Green Mountain, etc. I have had them trimmed for two or three years and as I would not get many grapes I would let them go without cutting them back and try that plan but no more grapes. I got a heavy growth of wood each year. The vines would grow all over the yard. I have put on horse and cow dressing, bones, iron, etc. Have I put on too much dressing and not the right kind. I have about twenty-five grape vines and twelve or thirteen different kinds, but did not get enough grapes this fall for my family, had to buy to have enough to eat.—E. M. Gorden, Mass.

Reply:—The trouble, as it seems to me is, that the vines have been stimulated too much with nitrogenous manures and the growth has been excessive and possibly the pruning too short for successive years. When there was no pruning it would seem that the vines should have borne normal crops. I would suggest very moderate pruning and giving trial for a year or two. The varieties are all right.

Green's Fruit Grower.—I have a Burbank plum tree, bought several years ago, that has made good growth and is a thrifty looking tree. It always blossoms and puts out fruit, but they always drop off before they are half grown. Will you please tell me the cause of it and what to do to prevent it.—A. M. Kendrick, Mass.

Reply:—It may be rot or it may be curculio, or both, that is the cause of the trouble, for both of these enemies of the plum prey upon the fruit in the eastern states. In case of rot, spraying with bordeaux mixture or self-boiled lime-sulphur will kill the germs and prevent the trouble, provided it is done thoroughly and in time. This should be done soon after the fruit is formed and again when it is about half grown. In case of curculio little can be done, but the addition of arsenate of lead to the sprays already mentioned is of some benefit.

Green's Fruit Grower.—1. What variety of quince would you recommend for planting for home use.

2. What varieties of grapes are the best keepers after they are picked. I have read quite a good deal in the papers about people being able to keep grapes for a long time after picking. This year I picked good bunches and dried them well and sealed the stems with paraffine and put them in a keg of fine cork that had formerly been used for Malaga grapes. They kept a week or two longer than in the open, but very soon they began to spoil. They were Niagras and Moore's Diamond. I thought maybe some varieties kept better than others. Wish you would give me any information

you can about keeping grapes.—Mary E. L'Hommiedieu, Connecticut.

Reply:—1. The Orange quince is the best variety for general use.

2. Our American grapes are of a very different character from the Malaga and other varieties of the foreign species, being much more juicy and cannot be kept as are the fleshy ones sent to our markets from Spain and Italy. However, the Catawba and some few others of our own kinds may be kept a few weeks later than the Concord, Niagara, etc., but we cannot expect them to be kept in good condition very long. In cold storage they keep fairly well until Christmas. If very cool and dry they will keep at home a few weeks after gathering time.

Prof. H. E. VanDeman.—I own 165 acres of rich, somewhat rolling heavy timbered land in Nipe Bay District, Eastern Cuba, which I have seen, having bought through a Missionary friend. Land is located near a United Fruit Co. line in the midst of a great development by a large sugar concern. What do you think of Eastern Cuba along citrus fruit lines.—M. C. Hinshaw.

Reply:—The great obstacle that confronts the individual settler in Cuba or any of the American tropical countries from making much, if anything, from the culture of bananas is the huge and cruel monopoly of the United Fruit Co. and a few similar pirates of the trade. They have the run of the seas and of the ports and markets of the countries where the fruit is sold and no small grower or company can compete with them and make anything. I once bought some land in Honduras, along with some friends, and we hoped to grow bananas to profit, but one of our number went there and found that all the trade must go through the hands of these sharks and so we never planted our acre. The culture of mangoes, avocados, pomelos and oranges may pay, but bananas never.

I have a few very nice Concord grape vines. Last spring I cut off about 100 slips, and immediately planted them on my son's farm twelve miles from here. Only one grew. Where did I make the mistake, and how ought I to have done?—John MacDonald, Mass.

Reply:—The Concord grape and many other kinds can be propagated very easily from cutting. They should be made about ten inches long and cut close to a bud at both top and bottom. The cutting should be made from wood that has not been injured to any degree by cold weather and the earlier it is cut from the vines in the fall the better. After making the cuttings in the late fall or winter, they should be buried in moist soil until spring. As soon as the soil can be worked well, the cuttings should be taken up and set out in nursery rows and cultivated by horse and hand hoe as any other plants should be. If this is all done well there is no reason why the most of the cuttings should not grow. Some of these particulars were omitted or not well done in the case mentioned.

Prof. H. E. VanDeman.—Four years ago I purchased apple trees from two different nurseries. The trees I received from one nursery had clean straight roots with very few fibre roots. Those from the other nursery had bunched fibre roots and now at four years old, the ground is matted with fibre roots which come almost to the surface of the ground. So far both lots are growing nicely. What is the difference and which is likely to make the best trees? What kind of stock is each grafted on?

In worming my peach trees I find some large worms almost an inch long, others so small I can scarcely see them. Will the large ones leave the trees next June and the smaller ones remain in the tree a year longer or will all leave the tree next year?—J. H. Shellenberger, Pa.

Reply:—It may be that the apple trees with many fibrous roots are affected with root gall and if so they are in a diseased condition and are not nearly so good a condition as those that are not so affected, although they may live and bear for many years. Both lots are no doubt, grafted on ordinary apple seedling roots.

The larva or "worms" of the peach tree borer come from eggs laid by winged insects and are very small at first, but grow to be over an inch long. They live in the tree about twelve months and then emerge perfect insects ready to lay eggs. But there are small worms of other species that are sometimes found living in the gum that comes out of the wounds made by the borers.

Green's Fruit Grower.—Will you tell me what to do with a young orchard which the deer have damaged—stripped the tops and bark? The trees were set last spring. Also what remedy to use to keep the deer out?—C. L. Colburn, Mass.

Reply:—The deer question and their damage to orchards, gardens, etc., is one

that is troubling many people in New England. There is a law in Massachusetts, so I have been told, that allows the shooting of deer that bother the farmers and this would be effective on all that could be caught in the act, but to keep watch, especially at night, would be no light job. The city sportsmen make the laws, usually, and the country people have to bear the injuries and annoyance. Nothing can be done to repair the damages to the trees but time or replanting and then the same or worse depredations by the deer may follow. I think we would have venison at our house if it was my case.

I have always been bothered in the fall of the year for several years with my trees, especially the leaves covered with little flies or bugs. Please tell me what I could do for them.—J. B. Durbury, Vt.

Reply:—It would be the best plan to send specimens of the insects giving the trouble to the State Experiment Station for examination and advice what to do to combat them. From mere description it is very difficult to tell just what insect it is.

Kindly advise me how to treat young grape vines to prevent from winter killing.—Heber J. Irwin, Utah.

Reply:—The grapes that are usually grown in Utah are of the vinifera class and are apt to be injured by the cold of winter. If the vines are covered up by mounding the earth about two feet high before cold weather begins, there is likely to be no damage. The vines are usually trained to grow as stubby

These little feathery chips or shavings are mostly of hard wood. I can get all of these that I wish and I have been using them around my newly set trees this summer with seemingly good results. My one year apple trees have made a growth as high as twenty-two and twenty-four inches. Cherry trees have also done good, one year trees making as much as sixteen inches of growth. Now I expect to continue to mulch this way adding more and increasing the circumference around the tree as the tree grows larger. Whenever I am able to move on the place and live there, which will be when I can afford to build a house on it, I expect to cultivate my orchard, but until then I will have to be content to mulch it which I can do now better than cultivate. By this method do you think I can expect as thrifty trees, (if I mulch quite heavy) as if I cultivated them? I expect to prune and spray them. I intend to plant mostly Jonathan and Grimes Golden apples, also some Duchess, a few more Delicious, Wealthy, Staymans, Winesap and a few Black Bens.—Geo. Flesner, Ill.

Reply:—It would seem that the only thing that is lacking to make ideal conditions for producing fine fruit on the land described and in the hands of the present owner is means of tilling the soil properly. Mulching is the next best thing and the planter shavings will do very well for this purpose and the coarse straw manure is still better. The grass and weeds mown on the land between the trees will also make a lot of good mulch. The wider it is spread about the trees the better.

The varieties chosen are excellent in

and the heat is just what the date requires. All that is needed in addition is plenty of water at the roots and reasonable care while the trees are young. By applying to the Bureau of Plant Industry at Washington, D. C., young trees or seeds of the choicest varieties known can be obtained free of cost, with directions for planting and caring for them. More beautiful and useful rows of trees along the irrigating ditches of the Salt and Gila river valleys could not be planted.

Prof. H. E. VanDeman.—Will you tell me what is the matter with a McIntosh apple tree I have in my orchard. The tree has a decided red look to it; the leaves are very small and the ends of the limbs are bare, the fruit also is smaller and not so prolific. It is a very fine tree, please tell me what to do for it. I have had my trees sprayed, but it did not improve this one.—James Norton, Massachusetts.

Reply:—There may be some disease of the roots or borers about the base that cause the strange appearances. Spraying with good judgement is beneficial to nearly all fruit trees in keeping the leaves and fruit in healthy condition, but unless the spraying is done intelligently, it is all guesswork and might do no good.

Apple Growing in Virginia.

The Shenandoah Valley, famed in story and in song as the garden spot of the world; hallowed by a thousand memories incident to the Revolutionary and Civil Wars, bids fair to excel its former greatness. Its present pre-eminence emphasizes the fact that "peace has her victories no less renowned than war." Says The Fruit Grower. Its slogan is back to the land, or rather back to the orchard. And as best I can judge, in this section at least, everybody has gone back. You are simply a "dead one" if you do not own or are not trying to buy or plant an orchard. The plain, unvarnished, gospel truth is that these people have the orchard fever. At any rate, that is my diagnosis.

The cause of this fever seems to be a sudden realization that this great section has just about the best apple land in the world. Farmers and business men have addressed themselves assiduously to the problems of fruit growing and they have mastered them. They have made more progress in this direction in the past five or six years than other parts of the state have in a generation. They are exhibiting and shipping fruit until the attention of fruit growers everywhere has been focused on them.

Orchard lands are in great demand. Only the other day a pretty rough tract of some seventy odd acres sold for \$251 per acre. Bearing orchards cannot be touched at double the figure.

Among the pioneers and prominent growers around are S. L. Lupton, Stewart Bell, T. W. Steck, E. V. Weems and John M. Steck. A host of others are doing good work and have splendid orchards. With prospects of a 75 per cent. crop, it seems useless to wish them prosperity. It is assured.

Virginia. —E. A. Schubert.

THE LITTLE WIDOW

A Mighty Good Sort of Neighbor to Have.

"A little widow, a neighbor of mine, persuaded me to try Grape-Nuts when my stomach was so weak that it would not retain food of any other kind," writes a grateful woman, from San Bernardino Co., Cal.

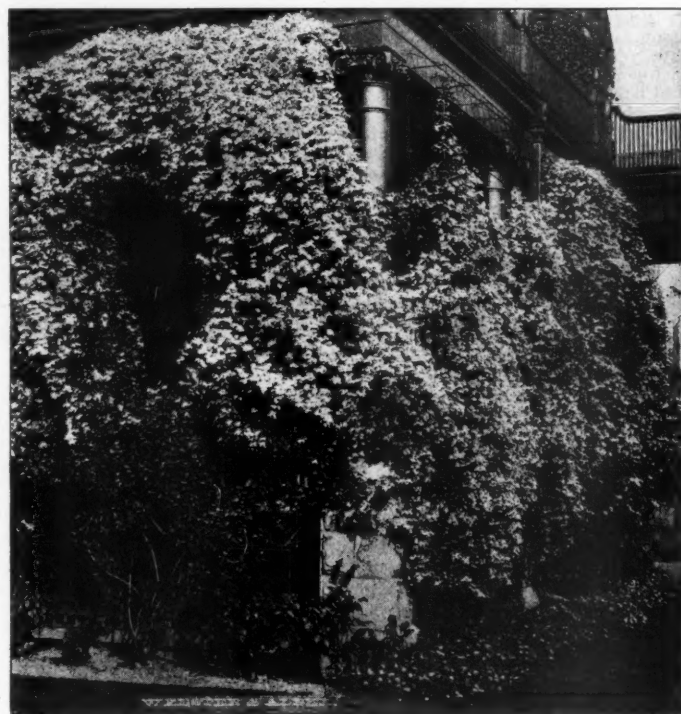
"I have been ill and confined to my bed with fever and nervous prostration for three long months after the birth of my second boy. We were in despair until the little widow's advice brought relief.

"I liked Grape-Nuts food from the beginning, and in an incredibly short time it gave me such strength that I was able to leave my bed and enjoy my three good meals a day. In 2 months my weight increased from 95 to 113 pounds, my nerves had steadied down and I felt ready for anything. My neighbors were amazed to see me gain so rapidly, and still more so when they heard that Grape Nuts alone had brought the change.

"My 4-year-old boy had eczema very bad last spring and lost his appetite entirely, which made him cross and peevish. I put him on a diet of Grape-Nuts, which he relished at once. He improved from the beginning, the eczema disappeared and now he is fat and rosy, with a delightfully soft, clear skin. The Grape-Nuts diet did it. I will willingly answer all inquiries." Name given by Postum Co., Battle Creek, Mich.

Read the little book, "The Road to Wellville," in pkgs. "There's a reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.



Clematis Paniculata in blossom. There are many clematis varying in size of blossom and color. Of all clematis there is no other one so easily transplanted and so easy to succeed with as this Clematis Paniculata. When in blossom the vines are completely hidden and covered with white bloom for a long period, resembling a bank of snow. It can be trained around the piazza or can be made to climb over and around shrubs. I have seen stumps of dead trees left on the lawn and completely covered with this clematis. Our Editor gives this clematis preference over all others.


bushes and in this form the mounds may be made to cover the trunks and lower part of the new growth. The tops of these canes are cut away in the spring pruning.

Prof. H. E. VanDeman.—I am a blacksmith, employed by the Bartholomew Auto Co. at Peoria Heights. The name "Heights" indicates that this is quite high ground. It is in my estimation, good fruit ground. I own five acres, just enough below the general level of the surrounding territory to have received a great deal of the soil. The soil is virgin; greatly covered with blue grass, in a dense mat. It has I am told, never felt the impulse of a plow before I bought it. About one acre is quite sloping, about two and one-half acres is gently sloping, just enough for good drainage, and one and one-half acres is in a valley drained by a small creek where the soil is about three feet deep. Now on the gently sloping ground I have started to plant to apple and cherry trees. Just a few to begin with, because money is a great object with me and I must act judiciously. Land cost me \$235 per acre. It is close to Peoria, however, and this is a splendid market for fruit and produce. Now comes my burden; my woe. I cannot cultivate the few trees which I have set out. I know it would be best if I could. I can't. I have been mulching them with straw manure, grass mown on the place, and chips or shavings from a power planing machine.

every way. For family use and market combined, I would suggest some Jefferi's apple trees and some Clapp, Seckel, and Lawrence pear trees. Berries would pay well if there was time to devote to their culture. A home market is the best of all.

Dear Sir:—I wish to know if dwarf pears or quince trees would do well planted along an irrigation ditch which gets water every eight days, but the water remains in portion of the ditch for from two to four days after irrigation. Would not this be too wet for them? Are there other fruits or berries that would do as well or better under such conditions? Soil is clay loam. There could be no cultivation as it will not do to stir banks of ditch, but same would be kept free from weeds. —E. B. Greenough, Arizona.

Reply:—It is probable that the soil would be too wet for the roots of the trees mentioned. But there is a splendid fruit tree that will flourish under the conditions mentioned and that can be grown in very few places in this continent. This is the date palm. I have been at Phoenix, Arizona and know from careful observations there and for many miles along the irrigated sections that this noble tree is growing and fruiting there with success. The date orchards near Phoenix and at Tempe only a few miles distant are sure proof of the profit in date culture there. The climate is sufficiently arid and temperate



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While it is a matter of right-of-justice—that farmers should buy their implements as cheaply as is consistent with quality, they can always afford to buy the best.

There are five points to consider in every machine: (1) Its purchase price must be fair. (2) It must do the work for which it is bought. (3) It must be economical to operate. (4) Its repairs must be reasonable. (5) It must serve a long life.

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Small Fruits

CURRENTS AND GOOSEBERRIES.
Says Prof. Crow O. A. C. Guelph, in Canadian Fruit Grower.

Gooseberries require a cool situation, with plenty of air and moisture, and should be partially shaded. They will not stand an exposed situation or where they get the very hot sun. Mulching, I believe, is a splendid practice in gooseberry growing. I am inclined to think that heavy mulching right along year after year is the proper way to grow gooseberries; it keeps the ground cool and moist, and if they are planted in partial shade, you have ideal conditions for gooseberries.

Black Currants grow under similar conditions; they want a cool soil and close pruning.

You will find a tendency to have too many shoots coming up from the bottom. The general principles of pruning currants and gooseberries are about the same. Black currants bear their fruit on wood three to five years old. The branches start from the bottom and make growth the first year, and go on until they become what you call five year old, and, if you take an old branch and look closely, you can see the lines dividing each year's growth. The principle of pruning is to keep the supply of three to five year old branches and when the branch gets five years old it is done and should be cut out right at the base, and you should have a four year old branch to take its place, and a three year old branch to take the place of the four year old one, and so on. You should leave enough strong young shoots each year to take the place of the bearing branches that you will cut. When a five year old branch is cut out, a hole is left in the bush and a branch should be left to fill that up. This is the general principle of pruning. Berries are pruned on the same principles but they bear best on three year old wood. Industry seems to be the best; White Smith is good. You will not be bothered with mildew if you get the plants in the right position. Some of the growers are having the very best success with the English gooseberry by spraying them with lime.

Mulch Small Fruit Vines.

A successful West Virginia raspberry grower gives the following reasons for mulching:

It prevents the growth of weeds.
It retains moisture in the soil.
It adds humus, one of the necessary elements.

It keeps the fruit clean and prevents mud at picking time.

It saves labor, the cost of mulching an acre with forest leaves or straw not exceeding \$15.

It prevents deep freezing.

It makes the fruit more solid for cultivation and better for shipping purposes.

It prevents the baking of the soil caused by tramping at picking time.

It has the disadvantage of encouraging mice and establishing a surface root system. However, we have not noticed any serious damage from either of these effects.

The cost of growing raspberries by nature's method, as I like to call it, is not very great. Picking is a nice job where there is no mud, no weeds and where the canes have been properly pruned.

Don't leave any old canes standing in the field.

Blackberries and Dewberries.

Blackberries and dewberries are easily grown; they are prolific bearers and soon reward the fruit grower who plants them. These fruits require a small area when grown for the home and even the city man who has a few square feet of land may have them, says Farm and Ranch.

Dewberries are nearly equal to strawberries in quality; some even prefer them to the strawberry. They have a wide adaptation to soil and climate and a failure is seldom. They are adapted to canning, in which condition they may be used in winter.

The blackberry is not as well appreciated as it deserves. It is a choice berry, having a peculiar flavor and is recognized as a healthful food. This berry has considerable medicinal qualities, all of which commend it to the home garden. There are few fruits as sure as the blackberry. It blooms late in the

spring and seldom suffers from frosty nights. It will thrive on thin, sandy soils and its yields is enormous.

The home garden should contain both of these small fruits as well as many others. The small fruits add variety to the orchard and furnish choice foods for the home.

Strawberry Culture in A Nutshell.

Make the soil rich.
Pulverize it thoroughly.
Plant as early as possible.
Shorten the roots to three or four inches.

Do not allow the roots to be exposed to the air.

Set the plants so that the crowns will be even with the top of the ground.

Press the soil firmly about the roots.

Cultivate after every rain and as many other times as are necessary to prevent the formation of a crust.



The above two photographs are views on the fruit farm of Allison Bros. of Indiana. Notice what a beautiful rolling farm they have. Notice the beautiful trees. How can anyone have the heart to destroy such trees as these, especially if they are nut bearing trees. The owners are strawberry growers. Did you ever see more thrifty or productive strawberry plants than those shown in the photograph? Notice the bevy of pretty girls in sunbonnets picking the strawberries. The men seem to be figuring up their profit.

Practical Methods in Growing Grapes and Other Small Fruits.

Experience has taught me that labor expended in preparation of the soil before planting pays best, therefore I would grow some hoed crop upon the soil before planting trees or vines, unless I had a clover sod to use for the purpose, which furnishes the best foundation for plant growth, the roots of the plant loosening and aerating the soil, and storing up the elements needed.

In our section we plant vines in rows nine feet apart, and ten feet apart in the row for free growing kinds, such as the Concord, Worden, Moore Early and Niagara. Varieties like the Delaware and Green Mountain can be planted 8 x 8. Care should be taken to secure vigorous well grown vines, preferably two years old. Mark the ground ten feet apart the opposite way from what you want the rows to run, then with a two-horse plow mark the rows for planting nine feet apart, going twice in a row and plowing as deep as you can (presuming that the land has been deeply and thoroughly plowed previously) so that in setting the vine it can have some loose soil under it, and I want to set the vine at least six inches deep so that the after cultivation will not disturb the roots, and a dirt mulch of three or four inches can be kept over the roots to conserve the moisture.

Before planting the vine trim off all superfluous wood, and leave only three or four buds to grow. As some hoed crop is supposed to be raised the first year (but never a sowed crop) it is well to stake the vines to prevent injury, and if vigorous growth is made it can be tied to the stake. The vine is now left until winter, usually February, when the strongest cane is tied to the stake, all side shoots cut off, and top shortened to five and a half or six feet. All other canes are cut close to the vines and all shoots that start from them broken off. If any fruit should set the second year it is best to remove it and let the strength of the vine go to the production of wood. In the fall of the second season or the spring of the third

season we set the posts in the rows leaving two vines between posts. Brace the end posts, and put two wires on them, one three feet from the ground and the other five and a half or six feet. We use No. 11 wire.

Third Year. Now trim your vine if it has grown enough so that you can do it leaving one arm on each side of the head of the vine. Cut these arms back to side buds each and tie to the wires. Trim the shoots along the wires and tie. Leave but few, not over ten, clusters of fruit remain on the vine.

Fourth Year. Select the best cane nearest the head of the vine for your bearing cane. Cut off all wood beyond it. Trim these bearing canes and cut off the ends, leaving ten buds.

Horticultural Observations.

At a recent horticultural meeting George T. Powell gave an instance of what manure will do. He made an experiment on Seckel pear trees, giving them a whole load of manure per tree. Fruit from these trees was put on exhibition the next season. The pears were so large that the judges ruled them out as Seckels and called them Sheldon.

A Kansas farmer has a novel plan for protecting trees against injury by rabbits. He mixes Frazer's axle grease and sulphur and applies to the trunk of the trees with an old cloth or piece of burlap. If the winter is mild, with considerable rainfall, he goes over the trees again. He says this mixture has always protected his trees, and no injury has resulted from its use. The "Fruit Grower" however, claims to have had many complaints of injury to trees from the use of axle grease, and says it will be well to experiment carefully before treating any considerable number of trees with the grease.

What is commonly called sun-scald, says Apple Specialist, is caused by the sun shining on the trunk of the tree in winter time, followed by a freezing at night. When the sun shines with sufficient warmth to start the sap, enough moisture will develop to do considerable damage. The trunks may be protected by shields of wood veneer, building paper or laths—which shields are also a safeguard against rabbits and mice.

Peach Orchard Management.

S. H. Fulton, a well known peach grower, in a horticultural meeting address said that spring planting of peach trees is best for Northern latitude. Prune thoroughly and head the trees low. From 10 to 14 inches from the ground is high enough. Three limbs are better than more in starting the top. Practice thorough cultivation, and use cover crops later in the season. Low hoe crops are best as nurse crops when the trees are small. Let hogs have the run of the orchard until peaches begin to ripen. Use lime-sulphur for the scales and peach-leaf curl.

"It is the hand of the diligent that maketh rich; and the diligent man or woman is attentive to small things as well as great."—Samuel Smiles.



JACKMANNI CLEMATIS—Flowers, when fully expanded, are from 4 to 6 inches in diameter; color, violet purple, with a rich velvety appearance.

FAVORITE FLOWERING PLANTS, VINES AND TREES. What Mr. C. A. Green Would Plant And What He Advises Others to Plant in Order to Ornament Their Own Grounds.

Some say that God is beauty and beauty is God. We will not all agree to this, but we realize that God must have loved the beautiful or he would not have created so much that is beautiful. Every father and mother, every home maker, would like to have a beautiful home surrounded by flowering vines, shrubs and trees correctly placed. The difficulty is that many people do not know just what to order of the nursery, or just what to plant in order to get the best results with the least amount of care or attention. In order to meet this want of the public for information, as to what to plant to beautify their home grounds, we have been at considerable expense for photographs.

There are some plants, vines and trees which are hardy, vigorous and beautiful, which continue to blossom year after year with but little care or attention, or give delightful shade. I describe simply those that you can rely upon as worthy of your attention and which will not need continual nursing in order to give the most brilliant results. For instance, I advise you to plant the rose, for there are some varieties of roses which are so delicate and so slow and slender of growth I am confident that there are many who would not succeed with them, but there are other roses which are hardy and vigorous, which can be safely planted by one who has no experience in rose culture. The same is true of other plants, vines and trees. There are hardy varieties that any one can succeed with. I shall call your attention only to those which I would plant myself, if I were in your place, after having had many years experience.

If you cannot do better I advise you to plant one tree or shrub each year, but if you can afford to plant five or ten dollars worth of ornamental vines, shrubs and trees now, I am confident you might get \$500, or possibly \$1000, to the value of your place, providing it is not already filled with these attractive creations.

HOW TO LAY OUT YOUR GROUNDS AND WHERE TO PLACE YOUR SHRUBS AND TREES.

The climbing vines can be planted on either side of your porch or where they may be trained up the side of the house. They may be trained up the trunk of a tree, the lower branches of which have been partly cut off, or they may be used to conceal unsightly out-buildings. Plan that there will be an open and unobstructed lawn in some part of your grounds, preferably at the front of your house, at one side. Do not plant anything in this open space. Place the trees on the outer edge of your lawn or home grounds, not in rows, but just as they would grow in the woods. One, two or three trees deep on the border, rounding the corners of the grounds so as not to leave abrupt angles there. Then in front of these trees, which you have placed on the border, place your shrubs, in the curved lines just as you see shrubby growing by the side of the woods. Then in front of this shrubbery will be a good location for a few beds of perennial or annual flowers, or a bed of grass.

Perhaps you may not be inclined to do this planting in one year. If this is your thought, do a portion of it now, and have the plan made on paper so that you can continue the planting another year. The main aim and object should be to have a border of trees and in front of those lower growing shrubs, and in front of those a bed of flowers and then an open space unobstructed for the lawn of the size of your place.

Barberry (Thunbergii).—Is a beautiful dwarfing plant. It is a dwarf type of cherry highly ornamental bearing beautiful red berries which are retained well through winter. In early autumn the foliage of this barberry turns to a beautiful red yellow attracting the attention of every passer-by. It makes a beautiful hedge and can be kept easily within bounds.

Peonies.—This is an old fashioned new fashioned flower. We can all remember in the days of our childhood annual blooming of the old fashioned peony. Of recent years the Peony has been greatly improved. Now it is a beautiful fragrant flower unexcelled by any other flowering plant for its reliable qualifications. It rivals the rose in beauty. It is easily cared for and transplanted. It should be planted in rows or as single specimens. When you approach throw a fork full of manure over each plant if you wish it to have a vigorous growth.

The work of the landscape gardener is said to be that which makes a place by properly locating the flowers and trees much as the artist makes a

picture by painting flowers and trees. The artist uses colored paints in making his pictures, but the landscape gardener uses the real flowers; the real shrubs and trees instead of paints. Thus landscape gardening in one sense is a higher art than the painting of pictures.

Golden Glow.—In past year there has been a demand for yellow flowers which was difficult to supply as there were few yellow flowers available for the ordinary planter. I have a yellow lily very fragrant and beautiful. There are yellow roses but most roses are other colors. Golden Glow gives us an abundance of yellow blossoms at small expense. These blossoms of Golden Glow remain in bloom for a month or more in later summer and early fall. After the plant has been growing a few years it will spread so that you can dig up from this one plant enough to make fifty plants. Thus if you plant the Golden Glow you will soon have an abundance of beautiful yellow flowers which will make an attractive background for a bed of flowers. They are an attractive group when planted in lots of ten to fifty, or scattered along the border of trees, where they will peep out to you among the foliage of the trees. Do not fail to plant this hardy and easily grown flowering plant.

Mock Orange (Philadelphus).—Orange blossoms are highly prized the world over for their beauty and fragrance. They often deck the bride at the wedding party. We have in the North this beautiful Mock Orange which is perfectly hardy, and which is as beautiful and fragrant as the Orange blossoms themselves. I know of no hardy plant which will come nearer caring for itself than this Mock Orange. It is a beautiful shrub, and on fertile soil it takes grace from the height of six to eight feet, but this and all shrubs, can be dwarfed or kept down as low as desired by annual pruning. This pruning should be done early in the spring before the leaves appear. Do not forget that you can make any shrub, vine or tree whether fruit or ornamental as low growing and dense as you desire, by annually cutting back the branches. You will see how easily you can keep a hedge at a certain low height. You can dwarf any shrubbery by treating it the same as you would a hedge plant which is pruned twice a year, but once a year will be enough for the shrubbery or trees.

I have the Mock Orange growing by my porch. Its fragrance wafts in through my open window and it fills my porch as I sit there reading or talking. I have also several specimens in the beds of shrubbery bordering the lawn.

The Yucca Plant (Filamentosa).—Nothing will give your place such a tropical look as will the hardy Yucca. Go where you may through the South you will find the Yucca blooming profusely not only in the gardens but in the fields or growing wild. This Yucca is entirely self-caring, enduring the severest winters, and never fails to blossom on my grounds at Rochester, New York. Its leaves resemble those of the Century plant. The Yucca would be valuable if it did not bloom at all since its foliage is so peculiar and attractive. It sends out strong shoots something like the century plant and continues in blossom a long time in mid-summer. You can plant it as a single plant in your bed of shrubs or flowers or in a bed. Probably not one of your neighbors will have this peculiar plant as but few people seem to know about it or appreciate its beauty. Do not fail to plant this beautiful Yucca plant.

Norway Spruce for hedging.—There are many plants suitable for hedges. If you desire a high or formidable hedge which will be a wind break you cannot do better than to plant the Norway Spruce. If left unpruned the Norway Spruce hedge would grow to a height of thirty or forty feet and this is the way it is grown sometimes as a wind-break and planted on the windy side of an orchard to keep the fruit from blowing off. Where it is intended to keep the hedge to a height of four or five feet it must be pruned regularly twice each year. Once in June and again in October.

Norway Poplar.—Can you imagine anything more unique, more novel, more peculiar than the Norway Poplar? How different it is from all other trees. It shoots up like the spire of a Cathedral and it shoots up rapidly. After planting the Poplar you do not have to wait long for it to become a good size tree. It is a land mark. It is something to the landsman as the lighthouse is to the sailor.

If at your farm home you have a few Poplars you distinguish your place from all others. For these Poplars can be seen for miles perhaps in every direction. You should not plant it near drains for its roots are hungry for water and will be inclined to clog the drains. These may cut back twice a year thus making a hedge. I consider such tall growing trees protection from lightning.

Ornamental Grasses.—I know of nothing more graceful and artistic than the



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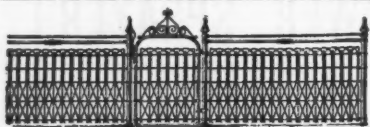
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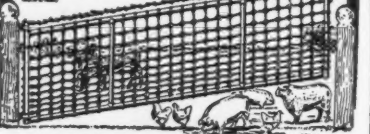
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ornamental grasses. If you plant a clump of this tall rampant growing grass it will usually care for itself and soon assume beautiful forms. There are different kinds of ornamental grasses. My favorite I call Ostrich Plume for the reason that in addition to its marvelous beauty as a grass bending with every breeze and glistening in the rays of the sun it furnishes a marvelously beautiful blossom as winter approaches. These blossoms or plumes can be cut and placed in vases where they retain their beauty all winter closely resembling ostrich plumes such as are worn on ladies hats.

Horse Chestnut.—This is a noble tree growing to great size on fertile soil. Its foliage is large and beautiful, its nuts are attractive and are eagerly gathered by the children but it is the blossoms which are the greatest attraction of this beautiful tree. It has one drawback and that is that its fruit litters up the ground but this is not a serious fault. Surely you should not miss planting a few trees of this Horse Chestnut.

Mountain Ash.—I have seen this beautiful tree growing wild in the Adirondack Mountains, which indicates its hardiness where they have severe winters in those mountains. Notice how beautiful is the foliage, but most beautiful of all are the dense clusters of bright red berries which appear on this attractive tree and remain then throughout the large portion of later summer and autumn and even into the winter. It is planted in our parks and is a feature possessing great beauty in the beautiful fruit it bears but it would be a beautiful tree even without its fruit.

The Althea.—This is grown as a shrub or in tree form. It is sometimes planted also in the form of a hedge. It is some times known as the tree of Heaven. We have it in various colors: white, bluish purple and pink. It is an attractive tree or shrub and it should not be omitted.

Spiraea Crenata.—this is one of the hardy and vigorous growing Spiraea and the blossoms are reddish and remain long attractively on the branches. This Spiraea is a marvelous plant appearing in many different forms of blossom and foliage. In addition to the many hardy varieties such as the Van Houttei and Crenata. In addition to these are the hot house varieties of marvelous beauty. They are easily grown as are all the shrubs, trees and vines named.

Golden Willow and Golden Elder.—This is a tree of the weeping or pendulous branches. The bark of this willow is the color of pure gold which makes the tree an attractive feature after the leaves have fallen. It is a tree of rapid growth. Usually it is not headed back as it should be. If you will cut back half the growth each year you will secure a beautiful tree from the Golden Willow. It will succeed anywhere on wet or dry land.

Clematis Van Houttei.—This spiraea is considered by many the most attractive of all spiraeas as it blossoms so freely. It may almost be mistaken for a bank of snow. It may be planted singly or in beds or grouped with other shrubs in beds. It is hardy and thrives under almost all circumstances.

Perennial Phlox.—If I should be asked to name a particular flowering plant which I prized most highly next to the rose I should say the Perennial Phlox. Phlox can be secured in almost every color varying from pure white to brightest carmine. They begin to blossom in August and continue for nearly two months. They are marvelously profuse bloomers. The plants are as easy to transplant as any weed, and they will continue to flourish year after year in the same bed from one planting for eight or ten years after which it is best to take them up and transplant them after separating the roots.

Phlox is one of the most beautiful plants that I have on my home grounds at Rochester, New York, and one of the most

easily cared for. The branches die down as winter approaches but new shoots come up the next spring with vigor. The Phlox appreciates good culture and rich soil as do most flowering shrubs but Phlox will succeed anywhere even with neglect.

I plant the Phlox in large beds partly concealed by the foliage of tall shrubs or mixed with evergreens and Golden Glow. There are strong growing varieties also Dwarfish varieties which can be placed on the front border of the flower bed with the stronger growing varieties at the rear. Whatever you do do not fail to plant a bed of Phlox.

Hardy Hydrangea or Hydrangea Paniculata.—I have said that the Phlox is one of my favorite flowers but I cannot allow it to take precedent over the Hardy Hydrangea. There is no flowering shrub more easily grown and cared for than this Hydrangea. It is a profuse annual bloomer and the blossoms remain highly attractive from July to October. The blossoms can be cut and placed in vases where they will remain beautiful though entirely dried all winter. While perfectly white when the blossoms first appear they gradually assume a pinkish tint later in the fall. This Hydrangea is attractive as a single bush or tree and is especially desirable as grown in the form of a hedge. This Hydrangea should blossom the first year planted.

One secret in growing Hydrangea is to cut back severely every branch every winter. This abuses the number of blossoms but causes each blossom to be many times larger than it would otherwise be and there are always enough blossoms left even if the shrub or tree is severely cut back. Do not fail to cut back the past seasons growth at least once when transplanted and every year after.

The Snowball.—Is a remarkable flower exceedingly attractive and showy remaining in perfect condition for a long time during midsummer. All trees or shrubs which have double blossoms produce no fruit. Double blossoms indicate fruitlessness or barrenness. The Snowball belongs to the same family as the Tree Cranberry, but the Tree Cranberry has a single blossom and produces beautiful fruit where the Snowball is double blossom and produces no fruit. The Snowball is so well and favorably known that it needs no description. No place is complete without a few Snowballs.

The American Elm.—This is one of the most beautiful of ornamental trees. It is especially admired by foreigners as there is nothing in Europe so beautiful. While I would not plant all Elm trees I would at least plant a few on the borders of the home yard. The Elm is a healthy, hardy tree, easy to transplant and requiring no cultivation. It will succeed on either wet or dry soil or on high or low locations. Its timber is valuable for many purposes, being hardy, firm and tough.

Carolina Poplar.—This tree differs radically from the Lombardy Poplar in as much as the Carolina Poplar has a lower head, wide branching, more like the Maple than the Lombardy Poplar. The foliage is also larger. This tree is used for planting along the highway, or for wind breaks or shields to barns or other unsightly buildings, and is noted for its rapid growth, the growth equal to the Lombardy Poplar, but more wide spreading and less tall.

The Lilac.—Ever reminds me of the old farm home where I was born, and where I spent the first twenty-five years of my life. In old times the Lilac was about the only ornamental shrub well known to farmers. Every year its delightful fragrance and its beautiful bloom reminded us children around the farm that we were one year older, one year further along on the journey of life. The Lilac needs no description. You know its beauty, its hardiness, its ability to care for itself even under the most notable neglect. Do not fail to plant Lilac either singly or in a hedge row or in a group of from twenty to fifty plants 4 to 6 feet apart.

The Norway Maple.—One of the most beautiful, hardy and easily grown shade trees. It differs from the sugar maple in being a more rapid grower and in forming broader and wider spreading head. This is a splendid tree for shade planting or for the borders of grounds.

The Smoke Tree or Cotinus.—This shrub is a novelty which is nearly always called a freak among flowering shrubs. The blossoms take on the appearance of smoke as shown in the photograph. When you suddenly come upon a bush of the smoke tree you almost feel as if you are approaching smoke, but when you come to examine, as you are inclined to do, you will see that the smoky appearance is simply caused by beautiful bloom. No place is complete without a few smoke trees properly located.

For mission work in rural England an automobile has been equipped with an altar and other fittings and duly consecrated by church authorities.

Swoppin' Lies.

A farmer too fond of the village
Cannot give his crops adequate tillage,
For the bugs and the blights
Cheat him out of his rights.
And he suffers from havoc and pillage.

The folks who profit by our faults will not censure us.

Strongest FENCE Made

Made of DOUBLE STRENGTH Coiled Spring Wire. Requires fewer posts. Always tight. Is heavily Galvanized with PURE ZINC.

Will outlast all others. Sixty different styles and heights to choose from. A FENCE for every purpose.

WE SELL DIRECT TO THE FARMER AT DEALER'S PRICES.

Be your own merchant and put the Dealer's Profit in your own pocket where it belongs. Prices the lowest ever quoted for a first-class fence.

26-inch Hog Fence, - - 15c. per rod.
47-inch Farm Fence, - - 23-5/10c. per rod.
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Special Barbed Wire, \$1.40 per 50-rod spool.

Biggest values ever offered and sold under our 30-DAYS-FREE-TRIAL-MONEY-BACK GUARANTEE-CONTRACT. Our big Catalogue contains information you ought to know. Write for it today. It's FREE.

COILED SPRING FENCE CO.
Box 100 Winchester, Indiana.

Make Your Money Work For You

JOIN us in completing the Dan Patch Electric Line and keep what your own money earns; get in on this chance of rich reward for the small investors who control their own dividends.

Dan Patch Electric Railroad

Is an example of what the people can do when they work together! A line running finely-equipped trains daily—with a big and growing freight and passenger business—the first electric road to tap the wealth of the great and growing Northwest.

This Electric Line is the greatest achievement of my business life—I consider. I have made a large investment in it—that's my faith in the Dan Patch Railroad! And 6000 others have joined me, until now we have a road that has 40 miles in operation—and 30 more soon to run—a wonderful proof of what can be done by the People when they pull together without interference of the "money-kings."

I offer you \$600 in voting stock absolutely free with an easy monthly investment in preferred stock

The Dan Patch Electric Line is in successful operation from Minneapolis to Northfield—about 40 miles, but I want to push on and complete it to Rochester, and I want you to join me. Be a stockholder—let your money work for you. But first

Write for my Free Books

One gives you all the facts about electric railroads and the Dan Patch Line; tells how it works, and where it's working—all about its solid substantial facts. The other book will give you some new and startling ideas about Wall Street and how it gets rich on your money. Don't delay—it will cost you nothing to get this information. Send for the books today and get all the details about me—and the Dan Patch Line and all the "REASONS WHY."

You should invest—whether much or little—and lay a firm foundation for independence of panics and Wall Street, and the men who run the "System." Write me now—today, on this coupon, or a postal.

M. W. Savage, President
Minneapolis, Minn.



M. W. SAVAGE, Pres. Dan Patch Electric R. R. Minneapolis, Minn.

Dear Sir: I don't know whether or not I'll invest any money, but I'm interested and want you to send me your two books, without any obligation to me—your "Book of Electric Facts" and "How Wall Street Rules With the People's Money."

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CLASSIFIED ADVERTISEMENTS

No display advertising will be placed in this department and no type larger than 6-point. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. Rate 10 cents per word for each insertion. No advertisement inserted for less than \$1 per issue. We cannot afford to do any book-keeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

HELP WANTED

WANTED—Three or four men who are good quick grafters and bidders and understand general nursery work. State experience and wages desired. Give reference. W. T. Hood & Co., Richmond, Virginia.

LOCAL REPRESENTATIVE WANTED—Splendid income assured right man to act as our representative after learning our business thoroughly by mail. Former experience unnecessary. All we require is honesty, ability, ambition and willingness to learn a lucrative business. No soliciting or traveling. This is an exceptional opportunity for a man in your section to get into a big paying business without capital and become independent for life. Write at once for full particulars. Address E. R. Marden, Pres. The National Co-Operative Real Estate Company, 1638 Marden Building, Washington, D. C.

FOR SALE

ELK FOR SALE.—One hundred dollars a pair. Phillip Dewey, New Richmond, Ind.

Helen Davis Strawberry plants from the original. Send for prices. Geo. W. Davis, Brazil, Ind.

BARRED ROCKS, Brown Leghorns, Toulouse Geese, Runner Ducks. Circulars free. Nelson Brothers, Grove City, Pa.

FOR SALE—Cumberland raspberry plants, \$5.00 per thousand. Silver Spangled Hamburgs \$5.00 per trio. S. H. Graybill, Richfield, Pa.

DAY OLD CHICKS FOR SALE. 17 varieties. Prompt shipment. Strong, natural hatched, thousands per week. Catalogue free. Old Honesty Hatchery, Dept. G, New Washington, O.

FARMS FOR SALE

Catalogue of Maryland Fruit Lands and Fruit Farms mailed free. J. Leland Hanna, Baltimore, Md.

TIDEWATER VIRGINIA—Northern colony, mild, healthy climate, small farms five or more acres, good schools, cheap transportation, near good markets, stamp for circular. Deverell & Co., Claremont, Va.

I BRING BUYERS AND SELLERS TOGETHER. If you want to buy or sell any kind of real estate or business, write me. Established 1881. Frank P. Cleveland, 2855 Adams Express Building, Chicago, Illinois.

NEW JERSEY FARMS. Headquarters New Jersey Farms, soil, climate, markets, conducive to successful farming as a business, combined with good home surroundings. Send for list. Albert Warren Dresser, Burlington, N. J.

MONEY-MAKING FARMS throughout 17 Eastern and Southern States, \$15 to \$50 an acre. Livestock and tools often included to settle estates quickly. Big Illustrated Catalog free. We pay buyers cash. E. A. Strout Farm Agency, Station 1233, 47 West 34th St., New York City.

WANTED

FARMS WANTED—We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 32 Palace Bldg., Minneapolis, Minn.

MISCELLANEOUS

HO FOR CALIFORNIA. For information write to J. E. Bevins, Chico, Cal.

BERRY PICKERS' TICKETS. The kind that saves trouble and dispute with pickers. Also keeps record of crop. Write for sample. C. Brammerbush, R. 4, Decatur, Ills.

COLD STORAGE is the best way of keeping fruit—everybody knows that. A frost proof or common storage building is not cold storage. In a cold storage plant temperatures may be controlled by artificial means. Investigate the Cooper Brine System, using ice and salt for cooling. Greatly superior results over common storage and also over refrigerating machinery; low first cost; absolute safety against breakdown. Madison Cooper Co., 110 Court St., Calcium, N. Y.

WAVE WASHES UP FISH.

More Than 200,000 Pounds Thrown on Sands at Ostend, Cal.

Los Angeles, Cal.—More than 200,000 pounds of fish hurled upon the sands, two fishermen nearly drowned in trying to escape from this remarkable avalanche, and the beach literally paved for a quarter of a mile with squirming, wriggling creatures, were the results of a giant wave's work at Ostend, between Long Beach and Terminal Island.

Hundreds stampeded to the shore, and with wagons, buckets, sacks and almost every conceivable receptacle carried the fish away, either to market or for their own use. Hundreds of fish, which must be destroyed, are still strewn along the beach. The fish deluge happened when three fishermen were seining the melt. The fishermen had set their nets only a short time before when they sighted a huge school of croakers heading direct for the nets. The men ran and had nearly reached the beach when the avalanche hit them. Two of them were knocked down and only after a struggle succeeded in getting safely ashore, where they found their companion, who had waded through the pile of fish, sitting upon the bank.

Setting Fruit Trees.

Do not let the roots get dry. This is important with all plants, but especially so with evergreens. Says Am. Cultivator. Trim off broken or bruised roots. The roots of a tree ready for planting should end in smooth cuts.

In planting, have the hole large enough so that the roots can take a natural position. Place the tree as high as, or a little higher than it stood in the nursery. Fill in the spaces between the roots with good friable soil, packing it well. After they are well covered, press the earth down well with the foot. Sometimes, it is well to settle the earth about the roots with water.

The usual rule is to trim the tops to correspond with the roots. Confine the trimming, however, to a portion of last year's growth. It is a mistake to cut a tree to a bare pole or to cut back large limbs. The last bud left on a branch that has been trimmed should point in the direction you wish to have the limb grow. A newly planted tree may be allowed to lean slightly toward the prevailing wind. When rather tall or slim or exposed to winds, it should be staked, or if very large, should be wired. In any case, the fastenings should be made in such a way as not to girdle or injure the trunk. It is generally better to screw an eye into the tree for fastenings than to put anything around it. Sometimes trees will need protection from animals. There are wire guards designed for this purpose.

The Boy And The Apples.

Boys have a sharp tooth for fruit and especially for apples. I can testify to the fact that a small apple orchard near a schoolhouse is not likely to be a good investment if the varieties planted there are such as ripen during summer or fall. Boys are hungry animals and nothing seems to appease their appetites better than bright red or golden hued apples.



When I was a boy at school I did not consider it sinful to leap over the fence and fill my pockets with apples going to or coming from the schoolhouse.

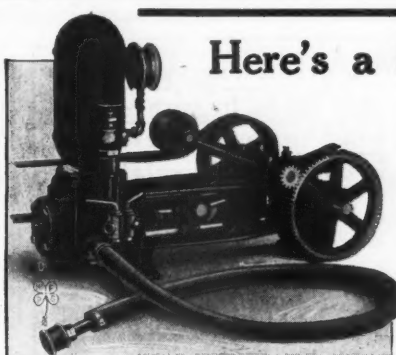
Doubtless the reader remembers the story told in the old school readers of the farmer who found a small boy in his harvest apple tree, and how the farmer tried to persuade the boy to descend without avail. Finally the farmer threw tufts of sod at the boy. These sods not being effective, the irate farmer picked up stones and threw at the boy, whereupon the boy descended and took his punishment.

The longing of the boy for apples indicates a healthy temperament. The apples will do him good internally and will improve the expression of his face and give him an air of contentment. Boys should be encouraged in eating apples and other fruits. In filling the boy's dinner pail for the noon hour at school it is well to place therein two or three attractive apples mellowed by the summer's sun. The boy would not suffer if his entire noon lunch were made up of a combination of apples, peaches, pears and grapes.

The fure of the boy in the cut, which is clipped from Turf, Field and Farm is expressive and suggestive. Here is a real live boy from his small skull cap to the strings with which he ties his shoes. He is boy all over. Study the expression of his face for a moment. If you keep the boy on the farm give him plenty of apples and other fruits. They will be tempting also to the wife and daughters.

The following extract from a medical advertisement is perhaps correct: "Consumptives, cough while you can, for after you have taken one bottle of my mixture you can't."

Gertie—"I wish you to know that I don't stand on trifles."
Helen (glancing at her feet)—"No, dear—I see you don't."



Here's a Spray Pump You Can Run With The Engine You Already Have

We've brought out a spray pump designed expressly to be run with the gasoline engine you now have. It does away with the troubles that have heretofore kept fruit growers from doing good work with a "bought" pump

operated by the farm engine and connected up at home.

Study the illustration a little, and you will notice how stout and substantial the pump is—every inch of it planned carefully, and figured over and over again. It is made on a rigid framework of cast iron and weighs about 200 pounds. We do not think there is an unnecessary ounce of metal anywhere about it, and the weight is distributed so the machine is well-balanced. It stands 25 inches high to the top of air-chamber, and is about 35x14 inches over all. It can be operated by any engine of two horse power or more.

Pump and engine are connected by a belt which cannot jump off. We furnish pulley and belt, and a spring idler which always keeps the belt just tight enough. Gear wheels are accurately cut.

Strong and Substantial and Durable, But Not Clumsy

that's the way we describe the Deming "Fig. 765". The cross-head is guided above and below—that means the plunger can be fitted snug and close in the cylinder. The good-sized air-chamber gives plenty of buoyancy, and holds the pressure steady.

The Deming "Fig. 765" has connections for 4 leads of hose, automatic relief valve and pressure gauge. All working parts are real brass.

Write for Particulars About Our Complete Line

We make gasoline engine sprayers of various types; hand-power sprayers, large and small, including barrel sprayers, knapsack and bucket pumps, etc. Our Catalogue will be mailed on application. It's one of the handiest books in Spray Pumps ever gotten out, and will help you make an intelligent selection of the outfit you need. Write for it now.

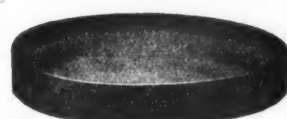
Consult Your Dealer or Our Nearest Agent.

Deming sprayers are sold by leading hardware and implement dealers nearly everywhere. Your dealer can quote prices and give you full particulars on Deming Spray Pumps. Insist on getting the DEMING; if he refuses, write us direct, mentioning his name. If you cannot secure Deming outfits at home we will supply you direct at factory prices.

THE DEMING COMPANY, 340 SUCCESS BLDG. SALEM, O.
Manufacturers of
Spray Pumps, Hand and Power Pumps for all uses, Hydraulic Rams, Etc.

DEMING SPRAY PUMPS

Sales Such As These
Are Made on Merit Only.



The Bolton Orchard Heater

is installed in

the Largest Apple Orchard—the Largest Lemon Grove—the Largest Orange Grove—in the World

It was necessary to prove the Bolton Orchard Heater was the best before landing such orders. The careful business management of these orchards does not guess in matters of this kind.

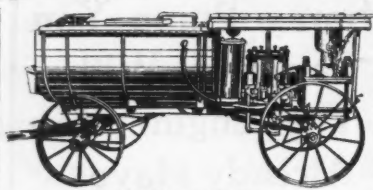
The Bolton Orchard Heater

invariably wins "hands down" in all field trials. Let us send you some data on this and also a list of users of Bolton Heaters. We are the originators and the largest manufacturers of Orchard Heaters in the world.

The Rex Spray Co. are our distributors in Eastern territory. Offices at the following points—Toledo, Ohio; Omaha, Nebraska; Rochester, N. Y. We have factories for Eastern orders at Kansas City and at Toledo, Ohio. Orders should be 60 days in advance for guaranteed delivery.

THE FROST PREVENTION CO.

Main Office, Bank of Italy Bldg., San Francisco, California
Kansas City Office, 109 Temple Block, Kansas City, Missouri



Duplex Power Sprayer
High-pressure, large capacity, light weight, low center of gravity. The greatest value ever offered in a power sprayer. Full specifications in our new catalog. Write for it.

THE BEAN SPRAY PUMP CO.
103 Front Street
Berea, Ohio
Western Factory: San Jose, Cal.

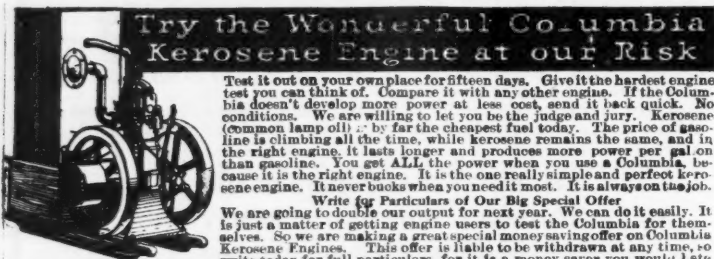
The greatest improvements ever made in spray-pump construction are described in our new 1912 catalog of BEAN SPRAYERS

Non-corrosive, porcelain-lined cylinders, indestructible ball-valves with removable and reversible seats. High-pressure, high-power engines and pumps, automatic pressure-regulator, etc.

A complete line of economical high-pressure Hand, Platform and Barrel Pumps, Power Sprayers, Nozzles, Accessories, etc.

Write for your copy today

When you write advertisers Please mention Green's Fruit Grower.



Try the Wonderful Columbia Kerosene Engine at our Risk

Test it out on your own place for fifteen days. Give it the hardest engine test you can think of. Compare it with any other engine. If the Columbia doesn't develop more power at less cost, send it back quick. No conditions. We are willing to let you be the judge and jury. Kerosene (common lamp oil) is by far the cheapest fuel today. The price of gasoline is climbing all the time, while kerosene remains the same, and in the right engine, it lasts longer and produces more power per gal. than gasoline. You get ALL the power when you use a Columbia, because it is the right engine. It is the one really simple and perfect kerosene engine. It never bucks when you need it most. It is always on the job.

Write for Particulars of Our Big Special Offer. We are going to double our output for next year. We can do it easily. It is just a matter of getting engine users to test the Columbia for themselves. So we are making a great special money-saving offer on Columbia Kerosene Engines. This offer is liable to be withdrawn at any time, so write today for full particulars, for it is a money saver you would like to miss. Free Book No. 67 full of engine facts you ought to know, sent free.

Columbia Engine Co., 67 Fuller St., Detroit, Mich., U.S.A.

LIGHT UP!

You can transform any kerosene (coal oil) lamp or lantern into dazzling brilliancy with our wonderful **Bright Light Burner**. 50 candle power invisible and **unbreakable Steel Mantle**. Brighter than electricity, better than gas or gasoline, and **perfectly safe**. No generating—simply light like any kerosene lamp. Nothing to get out of order. Positively will not smoke or flicker.

AGENTS WANTED EVERYWHERE. Sells like wildfire. An opportunity of a life time, work all or spare time. Experience unnecessary. Make big money—be independent. Write today. Act quick—territory going fast. Complete sample, post-paid, 30c, 4 for \$1.00. Money back if not satisfactory.

BRIGHT LIGHT CO., Dept. 51 Grand Rapids, Mich.

ALL FRUIT CLUB

Many readers are interested in securing data from every possible source, in regard to fruit growing. We quote herewith a special proposition covering five leading publications devoted especially to fruit, and we offer a bargain price.

A \$4.00 VALUE FOR \$2.50

REGULAR PRICE

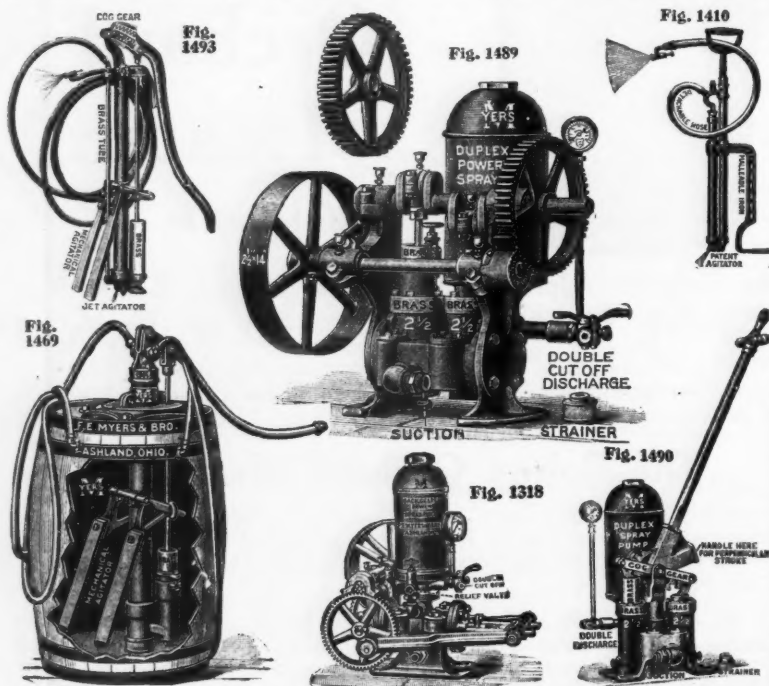
Green's Fruit Grower, Rochester, N. Y. 4 years.....\$1.00
The Western Fruit-Grower, St. Joseph, Mo. 1 year.....1.00
Better Fruit, Hood River, Ore. 1 year.....1.00
Southern Fruit Grower, Chattanooga, Tenn. 1 year......50
Fruitman and Gardener, Mt. Vernon, Iowa, 1 year......50

\$4.00

SEND \$2.50—GET ALL FIVE PAPERS

Green's Fruit Grower, Rochester, N. Y.

Myers Spray Pumps NOZZLES, HOSE AND FITTINGS



The above illustrations show a few New Myers Spray Pumps. These and many other styles from the small hand and bucket pumps to the large power outfits, together with our full line of nozzles and accessories will take care of any spraying need. It is not too early to prepare for your requirements. Write for our New Spray Pump Catalogue.

F. E. MYERS & BRO.

No. 150 Orange St.,

Ashland, Ohio

New Year.

Written for Green's Fruit Grower.

By B. F. M. Sours.

What joy, O happy New Year,
Hast thou in store for me?
I haste to bid thee welcome,
As when, from o'er the sea
A loved one comes, rejoicing
To greet the loved again—
Come, like past New Years, bringing
Thy precious freight for men!

What life, O happy New Year,
Hast thou in store for me?
Shall I be purer, nobler,
For my embracing thee?
Shall I be lifted higher
In service of my King,
Shall angels joy while heavenward
My hallelujahs ring?

O Jesus Christ my Savior,
Thou art the Lord of years!
Thine are the songs of triumph
Thy hand will dry our tears!
I kneel before thy Scepter;
I bow before thy Throne,
For Thou art my Redeemer,
And years are thine alone.

Thoughts About Pruning.

By C. A. Green.

I have just reached my office after an hour spent in pruning and in instructing the foreman of my Rochester place in his work.

As to implements we have the hand clippers, such are used in pruning grape vines, which will cut off branches as

I find that the dwarf pear trees require more pruning than most fruit trees, owing to the fact that they must not be allowed to form tall heads like standard trees for if they do they are likely to be blown over and to overbear. Dwarf pear trees should always be kept low headed, and this can best be done by doing a little pruning every year, shortening the new growth severely, the amount to be taken off being indicated by the vigor of the tree. Such strong growing dwarf pears as the Duchess must be cut back more severely than slow growing varieties like the Seckel. These dwarf pear trees which I allude to are in a closely planted row, which I call the dwarf pear hedge. The dwarf pear trees were planted in a row the length of my garden, over one hundred feet, the trees being planted three feet apart. Such a row of dwarf pear trees will supply a family with pears from August to January if properly cared for and pruned.

No two persons would prune a tree properly in the same manner. Here is an indication of the problem rising up before the man who prunes trees. Not only would each orchardist prune a certain tree differently, but almost every tree requires different pruning from others, hence the difficulty in giving written instructions in regard to pruning. The noted pear grower of this section,



A beautiful specimen of the American elm. Its low branches give this tree the form of a vase. We see many elm trees as we drive through the country. There are many wealthy men who would be willing to give a thousand dollars for the privilege of having such a tree as this growing near their home. An elm is a desirable tree for planting along the highway or for planting on the outskirts of the lawn.

large as your finger. For larger branches we have similar shears, as they may be called, a sharp curved blade about three inches in length closing against a curved prong about the same shape as the shears, these having wooden handles about three feet long. This implement will cut off a branch nearly as large as your wrist, but not quite. For larger limbs we have sharp saw. We have pruning shears attached to handles eight feet long with which we can prune the top branches of dwarf trees by pulling a lever.

I find on the borders of the lawn shrubs that have grown too tall. These I have ordered cut back half the length of the branches, or even more where the branches are five to six feet high. Even if these shrubs are sawed off one foot from the ground, a new growth will spring up and make a more vigorous and more attractive ornamental bush. It would have been better if these shrubs had been cut back every year a little, but as this cutting back has not been done yearly my only recourse is to head back the shrubs severely as I have indicated.

In cutting back flowering shrubs that send out flowers from last year's growth, like the golden bell, you will destroy all the blossoms of next spring by pruning now, therefore those particular shrubs should be pruned after they blossom next spring but before many leaves appear.

As the planting of the borders of the lawn was made closely, the trees in some cases being only six feet apart, I find it necessary now and then to cut out a tree or shrub to make room for the full development of others remaining.

Thomas Pell, cuts back every winter more than half of the new growth of every pear tree whether it is dwarf or standard. By this method his trees are all somewhat dwarfed, even the standard tree is not attaining the height of branches often seen on standard pears. This orchard ever has a thrifty appearance, and produces each season an abundance of first class fruit, selling at fancy prices in the market. He gives the orchard clean cultivation whether planted to dwarf or standard pears.

To the correspondent who inquires whether there has been any sudden drop in dry goods this week, a commercial writer says: "We have noticed but one. She said when we picked her up, that people who ate grapes ought not to throw their skins on the sidewalk."

A farmer wrote as follows to a distinguished scientific agriculturist, to whom he felt under obligations for introducing a variety of swine: "Respected sir: I went yesterday to the cattle show. I found several pigs of your species. There was a great variety of hogs, and I was astonished at not seeing you there."—American Thresherman.

Did you ever notice that a good healthy orchard always adds several hundred dollars or thousands, to the value of a farm in the eyes of a prospective purchaser? Women folks always take kindly to a farm with an orchard.

NEW ENGLAND FRUIT SHOW.

Some Gleanings and Some Lessons from New England's Greatest Fruit Show, Held in Boston.

Several features in connection with the recent New England Fruit Show, in Horticultural Hall, Boston, were particularly interesting. One was the exhibit of Mr. A. A. Marshall, of Fitchburg, Mass., which occupied a large amount of space on one side of the main hall. Reports N. Y. Tribune. Mr. Marshall is one of the leading exponents of fancy fruit growing in New England, but is best known for his high grade strawberries. This exhibit also places him in the front rank of apple growers. He has had great success with the Mackintosh variety, and the fifty or more boxes which composed part of his exhibit excited no little attention. This apple grows to perfection in New England, and has few superiors among fancy varieties. It is large and handsome, without being unwieldy, like the giant Wolf Rivers. A single specimen of this latter variety might be cut up like a pumpkin and make enough for a whole family. Such apples are too large to find a ready market in large quantities, and do not make an attractive package. The Mackintosh apples, on the other hand, are most inviting, whether in boxes or barrels.

There are some 5,000 trees on the Marshall farm, few of them over seven years old, and yet bearing well. The orchards are on hilly land, and are grown under the mulch system, the grass being left on the ground. No cultivation is practised, but the land was carefully prepared in the first place, much of it having been used for growing strawberries. After inspecting his fruit, both that in barrels and boxes, one felt renewed confidence in New England as a fruit growing section, provided the growers are willing to practice modern methods, and both spray the trees and thin out the apples. Mr. Marshall has been obliged to combat the San Jose scale, but that fact has not interfered with the success of his business, or the quality or amount of his apple yields.

In one corner of the hall was a very small exhibit which attracted much interest among professional apple growers seeking a high class market, because of a new style of package displayed. The exhibit was that of Mr. W. M. Davis, a Boston business man, who has an orchard near Marlboro. Mr. Davis considers himself merely a tyro, as he has owned this orchard only two years or a little more, but his methods are most business-like. The package which he uses is really a card board carton, and holds forty-five apples. The apples are not wrapped, but look very neat when the package is opened. When it is closed, a wooden handle may be attached and the package carried easily in the hand.

One of the largest fancy grocery stores in Boston handles these apples, often selling a carton to a man who is on his way home and who carries it along with him—a neat bundle containing forty-five Wealthy, Gravensteins, Mackintosh Reds or Baldwins, as the customer may prefer. The apples are picked and packed in the orchard, so that they reach the table without scratch or bruise, as perfect as when they leave the tree.

This method of marketing apples opens up many possibilities to the progressive farmer. It suggests the plan of selling direct to the consumer, as J. H. Hale, the peach king of Connecticut, is doing with his apples, sending them to a private trade all over the country. This form of carton makes an ideal package when only a few apples are wanted, and it is most pleasing to the eye, while it cannot be expensive.

Another exhibitor who believes in reaching the retail market is Mr. C. E. Hardy, of Hollis, N. H., an extensive apple grower, who was on hand throughout the show and took a large number of orders from visitors at \$4 a barrel. He tried this plan last year, and this year found the same people coming to him for another barrel.

The Cost of a Four-Year-Old Orchard.

We have another and younger orchard upon which the records have been kept. This orchard of five acres contains 126 standard apple trees, filled both ways with 375 peach trees. It was set in the spring of 1908, so that the trees have grown four seasons. Reports the N. Y. Tribune. The permanents (apples) are set 36 by 40 feet apart, so that, with the peaches between, the trees stand 18 by 20 feet apart. A crop of beans has been grown between the tree rows each season. The first season a full seven rows, twenty-eight inches apart, were planted in the wider space; the second and third season six rows, and the last and present season only four rows. The crop has been very good each year until the last. One application of manure, one crop of clover and one seeding of rye have been ploughed under, and in addition a liberal amount of commercial fertilizer has been used

with each crop. This year the peach trees bore their first crop. The record of the four years is as follows:

SUMMARY OF THE COST OF A FOUR-YEAR-OLD APPLE AND PEACH ORCHARD.

Year	Crop grown	Net income from crop	Cost of orchard	Profit	Loss
1908	Beans	\$63.37	\$130.12	—	\$62.75
1909	Beans	66.70	85.03	—	18.33
1910	Beans	79.81	83.39	—	3.58
1911	Beans	53.20	46.05	61.95	\$37.30

Totals.....\$267.08 \$46.05 \$360.49 \$37.30 \$84.66
Total cost an acre, exclusive of income.....\$72.10
Total cost an acre, including income.....9.47
Total net cost a hundred trees.....4.73
Total net cost an apple tree......376
Total net cost an apple tree, exclusive of income.....2.86

These figures show a still lower cost of growing trees to bearing age. After paying all expenses connected with the growing of the trees, including the interest on the land at \$150 an acre, and deducting the net profit from the crops of beans and the sales from the first crop of peaches we find that the growing of the trees has cost us \$9.47 an acre, or 37½ cents an apple tree at four years old. Had no crop been grown in the orchard it would have cost us at least \$62.89 an acre after deducting the income from the first peach crop. The peach trees are now at full bearing age, and should show a good profit from this time on. Possibly at five and certainly at six years of age this orchard will entirely have paid for itself. The only possible further charge which could be made against the orchard is the crop income which might have been obtained from the land had the trees not been there. We estimated that the presence of the trees cut down the crop of beans from the land 30 per cent. As the average net income from beans was \$13.35 an acre this would amount to \$4 an acre a year—an insignificant sum.

To Save Frozen Trees.

John S. Kerr writes as follows to the Roswell Record: As a stockholder and director of the Chrisholm Orchard Company of N. M., I have visited the Pecos Valley in the orchard interests. I am pleased to note very material progress in the general development during the past year, especially in orchards south of Roswell.

As to the effects of the early cold wave of last fall, when the trees were still growing, it is my opinion that the trees will recover without great damage to the ends of the twigs. If properly handled the apparent damage will be overcome in future growth.

The younger trees should all be cut back at once, removing the tips that were nipped by the sudden cold. No damaged wood should be left on the trees. By the time the spring growth starts, there will be no signs of the cold wave perceptible. The cutting back of the new growth is no disadvantage unless it be the loss of some fruit buds, and there is usually a surplus of these, and thinning out is no disadvantage.

I have seen much worse effects of frost in North Texas than that of the Pecos Valley last fall, the sap under the bark and in the heart of the younger trees, turning black. Even the forest trees were affected, apparently ruined, and in my time I have cut down blocks of both shade and fruit trees, thinking they were destroyed, but found afterwards that those pruned back to solid wood recovered.

Plant the Lawrence Pear.

Spring is a good time to plant fruit trees, whether it be in the colder or the warmer States. Set out early in spring, the trees get well settled before hot weather comes, and if properly planted they rarely fail to grow. Says Prairie Farmer. Noticing in our city market recently some fruit of the Lawrence and the Anjou pears which had been in cold storage all winter, it reminded the writer to again recommend these two excellent winter pears to those who may be considering the planting of pear trees. There really are no better ones than these, as the frequency of their appearing in our market suggests. The Lawrence is rather long in shape, of brownish yellow color when ripe, and as sweet tasting as sweet can be. Anjou is larger and not as long in shape, or perhaps better described as being wider in proportion to its length than Lawrence; and it is of a deep green color even when ripe. Its flavor is sweet and sprightly, yet not so sweet as the Lawrence. As they ripen here, the Anjou is the first to be gathered, reaching perfection early in October, while the Lawrence hangs on the tree until early in November; in fact, the writer does not gather his until freezing weather threatens, then to be kept in cold storage it is better to gather them before fully ripe, they keep better in the store house then, the temperature being but a degree or two above freezing point. Young two or three-year old trees are better to plant than larger ones. They recover from the planting quicker, and rarely fail to overtake them in growth in two or three years.

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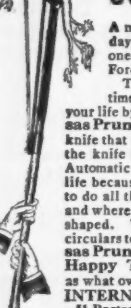
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Apple Orcharding in the East and West.

A Paper by Charles A. Green, Read before the Recent American Apple Exposition at Denver, Col.

There was a time, and that not very long ago, when Western New York was considered the Mecca of apple growing. There was no section of the United States considered so favorable to apple growing as this, but most of the orchards were of small size and were managed by farmers who had no particular knowledge of apple growing, and who were hard pressed for time to attend to their other farm crops, therefore their orchards were largely neglected. These farmers, knowing that their orchards had cost them but little or nothing in the way of cultivation or attention, figured that when they secured a marketable crop it was just so much clear profit, aside from the cost of picking, sorting and packing in barrels.

In the early days I remember a discussion in the Western New York Horticultural Society relating to what was then considered a marvel, a fifty acre apple orchard, located a few miles south of Rochester, N. Y. The question under discussion was whether it was possible to succeed with an orchard of this remarkable size, as it was then considered. It was the consensus of opinion that this orchard might fail owing to the fact that it would not be possible to secure enough barnyard manure to sustain the fertility of the soil in which the trees were growing. Now our Station expert says that New York State orchards need no fertilizers.

In past years apple growers throughout the country came to Western New York to gain information in apple culture and in methods of growing other fruits. I re-

barrel as a package for so long a period as eastern growers, have adopted the box as an ideal package, and now the box is considered the country over as the best package for first class fruit.

If twenty years ago some prophet had announced that within a few years carloads or train loads of apples and other fruits would be shipped from the Pacific coast to the cities of the Atlantic coast in successful competition with eastern grown fruits, the prophet would have been ridiculed as visionary. But this has been accomplished, and in the face of difficulties. Western fruit growers not only have to meet large freight bills, but in western localities, orchards are more subject to injury by late spring frosts which destroy the blossoms, and are put to a great expense for irrigation, and in many instances the land in which western orchards are located, costs more than in eastern states. Not only have the western fruit growers succeeded in surmounting the difficulties mentioned above. They have caused eastern fruit growers to ask continually this question. "How can we of the East compete with the fruit growers of the West?" There is but one answer to this question, which is, that eastern orchardists must organize, must grow better fruit, must grade it more carefully, and offer it in more attractive packages to the consumer.

I do not mean by what I have said that there are not skillful orchardists in Western New York, and in many of the other eastern states, for there are many such men. I can show you orchards here in which you would have difficulty to find a spear of grass or a weed, and in which



This is a scene on the farm of Simon Heberling, Newberg, Pa.

member many years ago writing to leading horticulturists of distant states asking their experience in fruit growing. Their reply was that they considered the fruit growers of New York State better informed than they were and that they had few suggestions to offer. Now, however, conditions seem to be reversed. Instead of orchardists coming to Western New York for information, fruit growers in Western New York go to the far west in order to learn how to produce the beautiful fruit grown in the western section of the country. Enterprising eastern apple growers have applied to western apple growers for experts in packing apples. These experts have been engaged at considerable expense to come to us in New York and tell our orchardists how fruit should be packed.

But while it cannot be denied that the soil, climate and methods of irrigation adopted in the far west have much to do with the size, beauty, and marvellous yields of the western orchards, due credit should be given to western men for their remarkable zeal and enterprise, and their lavish expenditure of capital, not only in preparing the soil and in its manipulation, but in advertising their products and in establishing associations for distribution.

IMPORTANCE OF DISTRIBUTION.

One great difficulty in fruit growing of the past has been the question of distribution. Too much fruit has never been produced in this country and yet serious gluts have occasionally occurred owing to inadequate systematic distribution. Eastern fruit growers look with amazement upon the successful methods of distribution at present organized throughout the West.

It is difficult to change old methods. In the eastern states apples have been marketed in barrels from time immemorial. There is no easier way of packing apples than to place them in barrels, but when you come to consider the question, and realize that but few consumers have places for storing a barrel of apples, and many have not the means to buy a barrel at a time, it will be realized that the barrel is not the ideal package. Western fruit growers, not having been tied to the

during almost every day of the growing season you would see a force of men engaged in pruning, spraying, thinning, or in other ways caring for their orchards, leaving nothing undone that could possibly lead to the production of superior specimens. But the eastern states are far more cloudy and rainy than many of the western states, therefore it may be doubted if we of the East can ever succeed in securing the beautiful color on our fruit which is such a prominent feature of western fruit.

IS THERE A DANGER OF A GLUT OF FRUIT IN THE YEARS TO COME?

At the horticultural meetings in the eastern states the perennial question has kept coming up: "Are we not sure to have a glut of apples, pears, peaches, strawberries and other fruit in the face of the large and continuous planting each year?" Each year this question seems to be a ghost at the feast, the majority of fruit growers quaking with fear that in succeeding years more fruit would be grown than could possibly be consumed. As far back as I can remember, forty or fifty years, fruit growers have been frightened at this terrible bugbear, which kept looming up continually before their vision.

I do not wonder at this annual fright when I consider the history of fruit growing in the eastern states. When I was a boy, fifty years ago, apples, peaches, pears, grapes, were hardly salable at all. They were not considered marketable products. I have known fruit growers to drive into Rochester, N. Y., with beautiful peaches and be obliged to throw them away or give them away. They could find no market for them, and yet at that time there were no orchards of any size, the production of fruit was of the most meager character, and the planting of trees scarcely noticeable. When you remember that the orchardists of the present time, or the last ten or twenty years, have this old problem of unsalable fruit in their memory, we cannot be surprised when we see them fearful that there will be a glut of fruit when they see orchards multiplying by the hundred or the thousandfold in every part of the country.

How then may we account for the fact that the markets have not been glutted, although fruit growing has been so largely increased in almost every part of this great country? The answer is that the masses of the people are learning to value fruit as food. They are learning that fruit is not only nourishing, but it is a healthful product and almost a necessity. Not only this, but they have learned that fruit is an attraction upon the table, improving the appetite by its appearance as well as aiding digestion and sustaining life.

I know of but one serious case of over-production, which was that of the prune growers of the Pacific coast a few years ago, but those who continued to produce prunes were in the end successful. Our Government reports states that the production of apples over the entire continent was 29,000,000 barrels less in 1909 than it was in 1895, a surprising statement if true. The decrease was largely owing to discouragement over the attacks of diseases and pests before efficient remedies were discovered. We are continually exporting apples in larger quantities, and the fact has become known throughout the world that America is the greatest apple growing country in the world.

We must not overlook the fact that the cold storage systems now in vogue will do much to prevent gluts in fruits. It is now possible to keep even summer apples well into the winter, and to greatly extend the season for marketing peaches, pears, and almost all other fruits.

Further than this is the problem of distribution, which in the early days was unknown. No one thirty or forty years ago, having a surplus of apples, peaches, grapes or other fruit on the farm, had any idea of shipping them in attractive packages to distant cities. In other words, early fruit growing in this country was not a business proposition, and in many sections of the country it is still managed in a very unsatisfactory and unprofitable manner.

CAUSES OF REFORMS IN FRUIT CULTURE.

It is a proper question to ask at this point: "What are the principal sources of reforms and improvements in fruit growing in this country?" In reply I will say that we owe much to such pioneer pomologists as Charles Downing, John J. Thomas, Marshall P. Wilder, Patrick Barry, John G. Warder, and others of that class, who devoted their lives largely to the promotion of fruit growing.

Next we have the horticultural and pomological societies working industriously in every state. Then we have the horticultural journals which have done far greater work, and accomplished more notable results, than they will ever receive credit for. Further than this, we have the State Experiment Stations, and the United States Pomological Division at Washington, D. C., all of which have been remarkably helpful.

Expositions, such as the "American Apple Expositions," have a great field before them and have accomplished marvelous results. When an American exposition can attract buyers and others interested in fruits, from Europe and other distant countries, who on arriving see displays of fruit such as the earth has never before witnessed, and such systematic and attractive packing and methods of transportation, too much cannot be said in favor of these and other similar associations.

Great credit should be given to enterprising and enthusiastic fruit growers who have had the courage to go far in advance of all previous achievements in locating orchards where formerly there were no orchards, and in backing up their theories with large sums of money. Such far-seeing men have opened up new territories, and have done much toward making this country a paradise of fruit growing.

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My Commercial Orchard of Nineteen Hundred Trees.

T. C. Smith, Lakeville.

I started my orchard in 1898, and added to it for four years, until now I have 1,900 trees. One of the most important points is to select the right varieties of apples for this latitude, and the next is to be sure you get trees from good, reliable northern nurseries. Do not allow any substitution in the order.

The fourth year after planting, plow early in the spring, being careful to have the ground smooth and level, and sow to red clover. Mow only once each year, about July 10th, and leave the crop on the ground. Let the second crop grow up through it; this will make the ground rich and keep it loose and moist. It will make a splendid soft bed for apples that fall off and prevent bruising them, and will keep them clean. It will also prevent blight in a great measure, in my opinion. This double cover will prevent deep freezing in the winter, and will protect the roots of the trees.

In our judgment a clay soil, or at least a clay subsoil, is best, and the land should be above the level, and, if possible, it should be lower on the north and east, in order to insure good air drainage.

The orchard should be left open on the north and east, with timber on the south and west to stop the force of the hard winds from these directions. Thus located, with right varieties of apples and proper care, there is no reason why the apple business is not as safe an investment for the man of moderate means as any other today.

There are about fourteen acres in my orchard, which I mow, with one horse, in four days. It also takes four days to mow, by hand, between the rows, making eight days in all.

I have a sprayer with truck and twenty-five gallon barrel, complete. With the help of a fourteen-year-old boy, I can spray 400 trees per day. The sprayer cost \$25.00. This season I paid \$25.00 for bordeaux mixture. I sprayed the trees once this season and have enough left to spray twice next year.

I wish to impress upon your minds the great importance of starting your commercial orchard at the earliest possible date. Remember that "Procrastination is the thief of time."

When I commenced my orchard I was about fifty-five years old. I had no money to speak of, having lost heavily in the machinery business, and I hired out to a harvester company on a salary. I looked about in every direction for some kind of business by which I could make a living, and at the same time get a home before I should be too old for work.

The apple orchard was the only thing that I could think of that would come soon enough for an old fellow like me. I found eighty acres (twenty of which was cleared), near Lakeville, Minnesota, which I could get for \$700. I paid \$25.00 to bind the bargain, and an old friend loaned me the money with which to make the purchase. And now as to the results:

In 1904 I sold 160 bushels of apples for \$125; in 1905 I sold 725 bushels for \$500; in 1907 I sold 1,980 bushels for \$1,765. You can see what strides that orchard has made since 1904. It needs no argument to convince any one with ordinary intelligence that the sooner one starts an orchard the sooner he will have big returns.

When I bought my eighty acres, it had no fences and no buildings on it. The orchard now has the best fence in the county; there is also a fifty-acre pasture fenced.

I have a fine, big house, and a basement under the entire house in which the apples are stored. In addition there is a good barn, a good warehouse, a good poultry house and a good machinery shed; all of these buildings are well painted.

Windfalls—The apple crop of the United States is estimated at 30,000,000 barrels, which, at \$2 per barrel, would yield an income equal to the total assessed valuation of Arizona. The money made on apples would pay half of the cost of constructing the Panama canal.

Fruit Trees Exhaust Soil.—In considering the reasons why apple and other fruit trees do not bear as many or as fine apples as they did in the early days, writes Prof. Garman of Kentucky station, I have been impressed with the importance of supplying the trees with fertilizers as the soil becomes exhausted, and am satisfied that the greatest relative difficulty experienced nowadays in keeping fruit trees in good condition is in part due to an exhaustion of the soil. Trees forage more widely than smaller plants, and may not show the effects of starvation as suddenly or as soon, but they must show it in time if grown long on the same land without anything being returned to the soil to replace materials removed by the trees. In this relation I was struck recently by a statement which I encountered in Prof. Voorhes'

interesting little book on fertilizers. He says that twenty crops of apples of fifteen bushels per tree, and thirty-five trees to the acre, equal 1,337 pounds of nitrogen, 310 pounds of phosphoric acid and 1,805 pounds of potash. Twenty crops of wheat, of fifteen bushels per acre, equal 660 pounds of nitrogen, 211 pounds of phosphoric acid, and 324 pounds of potash. Therefore, according to Prof. Voorhes, twenty crops of apples remove more than twice as much nitrogen, half as much again phosphoric acid, and nearly three times as much potash, as twenty crops of wheat. A good farmer would hardly think of growing twenty successive crops of wheat on the same land, no matter how good it might be, and it would seem to be still greater folly, according to the figures given, to attempt to grow twenty successive crops of apples without returning anything to the soil. But the New York Experiment Station says that in most instances apple trees need no manure.—C. A. Green.

Where Certain Varieties of Apples are Wanted.

By Professor Fraser of New York.

Baldwin—With the exception of New Orleans every reply indicated that this apple was excellent or good for their trade. It is the standard apple of America.

Greening—Mobile, Norfolk and New Orleans rate this as a very poor apple. Memphis and Pittsburg rate it as fair. In Richmond and Baltimore some of the trade find it an excellent apple and others but fair. In all other markets it is rated as good, very good or excellent. The highest prices are usually realized in Boston and New York.

Spy—Spy is regarded as an excellent apple everywhere except in Memphis, Mobile, New Orleans, Norfolk or Richmond and is only moderately good in Washington.

Hubbardston—But one market classes this as excellent and that is Indianapolis. Others regard it as good.

Wagener—This apple is in good but with the exception of Milwaukee and Richmond it has not made the highest reputation.

King—King is regarded as a very good or excellent apple for almost all markets.

Gilliflower—This apple is regarded as excellent in Baltimore, Pittsburg, Richmond, Washington and as very good in New York, Philadelphia and St. Paul.

Rome Beauty—It appears to sell well in Baltimore, Chicago, Cincinnati, Columbus, Denver, Indianapolis, Louisville, Memphis, Mobile, New Orleans, Omaha, Peoria, Philadelphia, Richmond, St. Paul and Washington.

Ben Davis—Ben Davis does not get the united supports of the salesmen in any one town as an excellent apple, although there are men in Detroit, Louisville, Milwaukee and New Orleans, who so regard it. Many elsewhere who say it is good.

Newtown Pippin—This is classed as excellent by some of the Baltimore salesmen, while there are men in Boston, Buffalo, Cleveland, Louisville, Milwaukee, New Orleans, Pittsburg and St. Paul who regard it as poor or very poor.

Roxbury Russet—Like Newtown Pippin this is not a great favorite anywhere. It is regarded, however, as very good or good by part of the trade.

Golden Russet—This apple has just about the same call as Roxbury Russet, neither of them being very important.

Seek-no-further—This is regarded as excellent in Baltimore, and by part of the trade in Buffalo, but it is grown to a very limited extent.

Jonathan—Jonathan has an excellent reputation in most of the markets although in Boston it is regarded as but fair to good.

Women as Fruit Growers.

Every owner of a home should plant trees. Fruit trees, ornamental trees, shade trees and nut-bearing trees. Says Mrs. C. E. Robinson in Farm and Ranch.

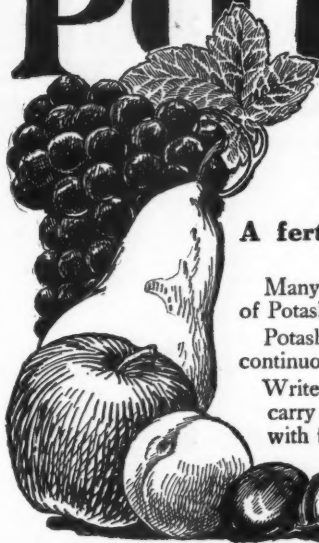
Fruit trees are essential to every well regulated farm home. Aside from the commercial value of fruit, ripe fruit contributes largely to pleasure and health, and stored for winter use, plays an important part in the bill of fare and lessens the cost of living.

Give the orchard a goodly share of time, thought and care. It pays in more ways than one. Around the home plant shade trees. Select the kind that is most ornamental, and plant in rows on the lawn or parallel with the yard fence.

Trees that are well tended beautify a home. During our own lifetime we can enjoy the fruits of our labor, and perhaps after we are peacefully sleeping our last sleep, others will bless us for our work.

Mrs. Oldum—"I hope you and your husband live happily together?" Mrs. Strongmind—"I should say we do. I'd just like to see him live unhappily with me!"—Wasp.

POTASH



Your fruit is not at its best in yield, flavor, color or shipping qualities unless the Potash supply is adequate and available.

A fertilizer for fruit should contain at least 12% Potash

Many growers use annually 200 lbs. Muriate of Potash per acre.

Potash also insures strong wood and early and continuous bearing.

Write us for prices if your dealer doesn't carry Potash Salts; also for our free books with formulas and directions.

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You can make big money growing good berries, but you cannot expect to grow good fruit by planting and replanting small inferior stock.

Our plants are all grown on new ground (this being the first crop) and are large, heavy rooted and free from disease.

We grow them by the million on our own ground and know what we are selling. That is why our business has nearly doubled every year for the past twenty-two years.

We can save you money on 100 plants or a car load. Our large illustrated catalogue is instructive and is free to all fruit growers. Write for it today

O. A. D. BALDWIN, R. D. 10 Bridgman, Mich.

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That makes the Acme Corn Planter handy for either right- or left-handed men. Gives it balance, too. It has double springs on the trip lever. Its drop is accurate and can be changed in the field without a screwdriver.

ACME PLANTERS

Don't furrow out for your potatoes, break your back dropping them, and then still have them to cover. Plant them as you walk along, regularly, at even depth, and leave the ground level when finished, with an Acme Potato Planter. Write for booklet, "The Acme of Potato Profit," and name of nearest dealer. If it is handier for you, we will ship, prepaid, on receipt of price.

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We have the largest varieties of tomatoes in the world. Specimens have been grown weighing over 4 lbs., and of superior quality and flavor. Can you do as well? It's certainly worth trying. Send 10c, stamps or silver, and we will send a trial packet (50 seeds) of each of these varieties, viz.: Majestic, Red Majestic, Yellow Majestic.

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are offered for the largest tomatoes grown this year. Full particulars with each package. Ask for our complete illustrated catalog of novelties and standard sorts vegetable, flower and farm seeds. Dept. 27 Iowa Seed Co., Des Moines, Iowa.

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We paid \$350.00 for the 10 ears winning the Grand Champion Sweepstakes prize at the National Corn Show. This is a record-breaking price. We planted every kernel of these 10 ears on our own farm. Every corn grower will want to know the result, so we have a booklet, nicely illustrated with actual photographs of our growing corn fields, seed barns, residence, pile of ear corn harvested from 10 seed ears, etc. As long as they last you may have one without cost if you are an actual corn grower or directly interested in corn crops. If you would like some of the seed grown from these 10 ears, we will tell you how to get it without cost. Seed and Fruit Catalog Free. W. N. SCARFF, New Carlisle, O.

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Good gardeners are those who raise good flowers and vegetables. Good flowers and vegetables come from good seeds. We produce good seeds—the inference is obvious. For sale everywhere.

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are the best. On their own roots. Express paid under special plan. Growing plants delivered FREE, anywhere. Satisfaction and safe arrival guaranteed. 61 years' experience. Write for 1912 "Dingee Guide to Rose Culture". Most reliable Rose Catalogue—106 pages. Mailed FREE. Describes and prices nearly 1,000 roses and other plants tells how to grow them. Best flower and vegetable seeds. Estab. 1850. 70 greenhouses. THE DINGEE & CONARD CO., Box 152, West Grove, Pa.

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\$1.20 Worth of SEEDS Postpaid For Only 10c

1 Pkt. Astors, Floral Park Mixture
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1 Pkt. Caravans, Finest Mixed
1 Pkt. Star Flower, a Novelty
1 Pkt. Mignonne, Sweet Scented
1 Pkt. Abyss., Carpet of Snow
1 Pkt. Poppy, Double Carnation Flid.
1 Pkt. Candyfist, Sweet Scented
1 Pkt. Petals, Finest Mixed
1 Pkt. Perfection, Choicest Mixed
1 Pkt. Summer Cypress (Burr's Bush)
1 Pkt. Sweet Pea, Large Flid. Mixed

We will send the above 12 packets of First Class flower seeds, our new illustrated Garden Annual, and a 10c gift to you for winter use. Your money back, all for 10c postpaid.

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TOMATO FIGS

A beautiful and valuable novelty much used for making figs. Plant grows in bush form, literally covered with fruit. The skin and flesh are a rich golden yellow, solid, thick-skinned, with a pleasant flavor. When canned or dried in sugar, like figs, make excellent pies or tarts for winter use.

For Only Ten Cents
We will send packet Tomato Fig Seed and a Surprise Packet of other new seed in a 10c. rebate envelope, which when emptied, will be accepted as 10c. payment on any order for seeds in our 1912-3 color catalogue which is included FREE. Order today.

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SPECIAL OFFER:
Made to build New Business. A trial will make you our permanent customer.
Prize Collection: 10c. 12 varieties. Let- tish, 17 varieties. Tomatoes, 11 the finest; Turnip, 7 splendid; Onion, 8 best varieties; 10 Spring-Summering Bulbs—46 varieties in all. GUARANTEED TO PLEASE.

Write to-day; Mention this Paper.
SEND 10 CENTS
to cover postage and packing and receive this valuable collection of Seeds postpaid, together with my big Instructive, Beautiful Seed and Plant Book, tells all about the Best varieties of Seeds, Plants, etc.

H. W. Buckbee, ROCKFORD SEED FARMS
Farm 191 ROCKFORD, ILL.

Farm Department

Farms Offer Great Possibilities.

A young man walked into a business office at Rochester, N. Y., a few days ago and applied to the advertising manager for a position.

"What have you been doing?" the young man was asked.

"Working on a farm," he replied.

"Got an idea you can make more money in the city, eh?"

"Yes."

The advertising manager used to live on a farm and he appreciated the applicant's frame of mind and point of view. He saw the long, hard, ill-paying road the young man before him would have to travel if he left his country home and all untrained in city ways, attempted to make a living in strange surroundings. Then he gave the young man some leaves from the book of city experience and when he got through he was rewarded by hearing the young man say:

"I guess I'll go back and try the farm again."

Some of the arguments used on the boy are to-day going home to more than one city dweller. Some city folks have little, some have much of the world's goods. Both classes make up the army that is steadily, and in increasing numbers each year, marching "back to the land."

"If you come to the city," said the advertising manager to the boy. "You may get a place for \$6 a week. You will, if very faithful and unusually intelligent, get a raise of what will amount to \$1 a week per year, so after you have worked six years you may get \$12 a week and your expenses will probably be \$11.95 if you are saving."

"If you stick to your work, perhaps you would get \$25 per week when you get to be thirty-five years old. You'll still be working for someone else and all your earnings will be needed to support your wife and children. Then, pretty soon, you die and your funeral expenses are paid out of your insurance policy, if there's anything left after the loan is paid which you got to wipe out doctors' bills."

"Now when you leave the farm you are leaving the very best opportunities which any American boy without money can possibly have. Your little farm home has bigger money making possibilities than anything you could work up to in this city, or any other, in a good many years."

This statement made the young man from the country look at the speaker with wide, doubtful eyes.

"You can go into farming on your own hook with almost no money at all. You don't need it because you've got the 'know how.' You can start in raising strawberries in a small way and make fifty to 100 per cent. more than was possible fifteen years ago. You can raise from 3,000 to 6,000 quarts of strawberries on a single acre of ground and if you sell them at only five cents a quart you get, say \$300, and after taking out, say one-half for expenses you have \$150 left for the use of the land and your work. Then there are raspberries, blackberries, currants, and a dozen other fruits and vegetables that you can make bring you in money all the summer through. You can become independent in a few years, all you work for and produce is yours. There never was so good a time to make money on the farm, particularly on a small one near a big city like Rochester."

"To-day you can have on your little farm such modern luxuries as the telephone, free delivery of mail, the daily newspaper and magazines to read after your day's work. Then there's the trolley that takes you into town in a few minutes. You can earn an automobile in a short time so you can skim over the fine state roads to the city. These things your father did not have on the farm when he was a boy."

"You can go into farming, or fruit raising with less money and make a bigger percentage of profit in a shorter time than in any old established business in Main Street. Your 'know how' will be your only capital."

The Importance of The Farmer.

The North Atlantic division includes New England, New York, New Jersey and Pennsylvania. The New York Sun has taken the trouble to tabulate the farm statistics of these states, and some of the figures are staggering. It is found that there are in this territory 653,623 farms, of which 520,748 are operated by owners, 118,678 by tenants, and 14,197 by managers. The value of these farm properties is conservatively estimated roundly at \$4,000,000,000. This valuation in-

cludes land, buildings, implements and farm animals. It is found that of the farms operated by their owners fully sixty per cent. are un-mortgaged.

Conservative estimates, based upon figures given out by the Bureau of the Census, place the value of all such farm properties in the United States at approximately \$40,000,000,000, as against a total valuation of \$20,500,000,000 given in the census returns in the year 1900.

It is an interesting fact that the increase in the total number of farms during the last decade is understood to be from ten to twelve per cent., while the total value of the property comes very close to being doubled.

It would be interesting to know the extent of the influence of modern scientific farming in producing these changes. For, when the disproportion between the increase in the number of farms and the increase in valuation is noted, it is plain that radically changed methods of farming have been brought about since the century began.

Farm Hints.

Many days of fine weather for plowing are to be looked for this fall, and the farmer who embraces the opportunity will be considerably ahead when next spring comes. It is advantageous to do all the plowing in autumn that can be managed, says the American Cultivator. Aside from the benefits directly to the soil, the team is in good condition for work, and the weather is cool and exhilarating, while fall plowing enables the farmer to get his crops in in much better season in the spring. Let the plow run a little deeper in the autumn than in spring. The frosts of winter will pulverize and mix the soil, and when spring comes, by thorough working with the harrow, there will be a deep seed bed for the roots to penetrate.

The Grape Vines.—Pruning of the vines may be properly done now. It is much better to do it thus early rather than to delay the work until February, as some recommend, for then the weather may not be suitable; and then there is a chance that it will be neglected until spring, when, on account of bleeding, it is not advisable to prune, if it is possible to do it before.

Storing Apples.—It is important that the apple trees be put in the cellar before they get chilled, as it injures their keeping qualities very much to get chilled seriously. It is best to store in large bins or as near air-tight receptacles as possible, as they will keep much fresher than when exposed too much to the air.

The Flower Garden and Orchard.—Auriculas, pansies, choice carnations, etc., and plants that cannot stand the winter, and that were not housed should speedily be placed under cover. Dahlia bulbs should be taken up and placed beyond reach of frost, heat or wet. Any bulbs, especially late tulips, not planted last month for spring flowering, must now be speedily gotten into the ground. Roses for next season may be planted in good, loamy soil. Any seeds of plants that remain may be gathered and dried indoors.

Fruit trees may be pruned and planted in fair weather. Pruning requires great care, but is very necessary. Large boughs should very cautiously be cut off healthy bearing trees. Some authorities recommend that the pieces cut off should be burned, and the ashes strewn over the ground about the trees, after it has been dug up. Every branch which chokes up the center should be cut away. Cut back to good joints. Ground should be dug well over; the exposure of the soil to the weather does much good. As a rule it is well not to manure ground in autumn because heavy rain washes it away.

Dragging the Road.—In neighborhoods where the split log road has been used the past summer the work is apt to be discontinued in late autumn, but it is best not to do so. Let the drag be used continuously all winter even whenever the road may be thawed out so as not to lose the benefit of what has been done.

About the House and Barns.—Has everything been done for convenience and comfort at house and barn? If not, no time should be lost in this very important work.

The prudent, careful farmer necessarily spends much time at the barn tending to the wants of the animals under his care, and the aim should be to have all things convenient. Each year there are likely to be some changing that can be made, or additions that will be of more or less value. These should receive attention as desirable and helpful. This can be done without being extravagant or striving merely for show.



Genasco

the Trinidad-Lake-Asphalt Roofing

is the lasting roofing for this reason:

Trinidad Lake Asphalt is natural asphalt, full of life and vigor that are put in and kept there by the oily nature of this asphalt. Genasco is made of this natural asphalt, and has all its permanent weather-resisting qualities which keep it lastingly waterproof.

Roofings that you don't know about are risky. Their looks are apt to deceive you. Be on the safe side, and get Genasco Roofings—mineral or smooth surface. Fully guaranteed.

The Kant-leak Kleet insures the perfect application of roofing—makes seams water-tight without smeary cement, and prevents leaks from nail-holes. Ask your dealer for Genasco with Kant-leak Kleets packed in the roll. Look for the hemisphere trademark. Write us for samples and the Good Roof Guide Book.

The Barber Asphalt Paving Company

Largest producers of asphalt and largest manufacturers of ready roofing in the world.

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Cross-section, Genasco Smooth-surface Roofing

Trinidad Lake Asphalt Asphalt-saturated Wool Felt Trinidad Lake Asphalt

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is an exquisitely illustrated book of 66 pages, printed in natural colors. Gives lifetime experience on rose culture. Describes wonderful Hootier roses—world's best for home planting. Also full line of hardy plants and shrubs of all kinds. Your name on postcard brings book FREE. Be sure to write today.

HELLER BROS. CO., Rose Specialists, Box 100, New Castle, Pa.

STRAWBERRY PLANTS

Trust your orders for strawberry plants to a company that insures you of the best plants grown from new beds and true to name. Proven varieties of all seasons and adapted to all sections. Of safe arrival to any point in the United States and advantage of 25 years experience in growing and shipping strawberry plants. Send now for descriptive catalogue and price list. Give us a trial order and our methods and stock will secure the others.

D. McNALLIE PLANT & FRUIT CO.,

SARCOXIE, MO.

CHANCES TO MAKE MONEY.

I have just returned from a six weeks' trip through Northwestern States and Canada, spent investigating the fruit industries and resulting profits. The apples, etc., are magnificent, but the prices of land ridiculous; \$200 to \$300 per acre for unimproved land, under ditch. Why, you can get land in Mexico better than any I saw on my trip absolutely free. All you have to do is to have five acres of bananas planted within five years. For particulars regarding Mexican Free Land, (printed in English) address The Jantha Plantation Co., Block 924, Pittsburgh, Pa. You can have the bananas planted without going to Mexico, and cared for on shares, and your share should be about \$200 per acre. Bananas begin bearing in from 12 to 15 months. Why pay \$200 an acre, when you can get better land free?

Great Crops Of STRAWBERRIES

And HOW TO GROW THEM

Is a complete treatise on strawberry culture written by America's greatest strawberry expert. Indorsed by agricultural colleges and strawberry growers of highest authority. Government reports show that strawberries yield more dollars per acre and give quicker returns than any other crop. Get our book and learn how. IT'S FREE!

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Cures Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Sores, Wire Cuts, Bruises, Swellings, Lameness, and all Pain quickly without blistering, removing the hair, or laying the bone up. Pleasant to use. \$2.00 per bottle delivered. Describe your case for special instructions and Book E. Free.

ABSORBINE, J.R., liniment for mankind. For Strains, Painful, Knotted, Swollen Veins, Milk Let Gout. Price \$1.00 per bottle at dealers or delivered.

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HARTSHORN

SHADE ROLLERS

Original and unequalled. Wood or tin rollers. "Improved" requires no tacks. Inventor's signature on genuine.

Stewart Hartshorn

How to Improve Eastern Farming and Fruit Growing.

Raymond A. Pearson, formerly Commissioner of Agriculture of New York State, now President of our State Agricultural Society, in a recent address calls attention to the bright outlook for farming in this State, from which Green's Fruit Grower condenses as follows:

Production is not keeping far ahead of consumption in the products of the farm and the cost of living is increasing. We must consider the danger of a shortage of production of farm products and must continually consider the development of agricultural resources and the relation between this problem and the cost of living.

We are living in a period which will go down into history as the turning point in eastern agriculture. Eastern farms and farmers have borne the chief burden of the development of the west, while other interests were benefited. We have seen our sons and daughters leaving the old homes to make new ones in the west, and to develop fruit growing and farming there, removing capital from the east for the rebuilding of the west. Eastern capital has also gone largely to the south, thus the farms of the eastern states have been continually losing not only their energetic sons and daughters but their capital.

Eastern farmers unorganized are called upon to compete with western farmers and fruit growers who are thoroughly organized. The farmers are suffering from the exactions of middlemen who often pocket half of the price of produce sold to the consumer.

Remember that the natural resources of our farms have been recklessly wasted, and that the time for preventing this waste has arrived.

We proudly boast that we are a prosperous nation. It would be better to humbly acknowledge that we are a prodigal nation. Our prosperity has been at the expense of our capital stock. Now we are told we must correct our wasteful habits or the very existence of our nation and our civilization will be in peril. We have heard most about the waste of timber and coal, and some of these wastes still continue.

EXTRAVAGANT WASTES.

There have been also extravagant wastes in agriculture and some of these still go on. Perhaps no other one is as serious as the loss of plant food from the soil, which has accumulated during centuries. The removal of crops without returning their equivalent to the soil depletes the soil. The crops go to cities for feeding men and animals, and thence the fertility finds its way to the sewers and dumps and finally to the sea. En route to the sea from our inland cities the valuable plant food in the sewage often serves to pollute streams and lakes that otherwise would be pure. A conservative estimate places the value of plant food that is lost annually through New York city as \$10,000,000, and from the entire state the loss amounts to \$20,000,000 a year. Can any conceivable mass of wealth indefinitely withstand such losses? Is it not true that we set our chemists and engineers to work upon this problem? And why should not New York be the first state to take this step? The question should be studied with a view to the saving of all household fertility—both in city and country. Some day a satisfactory and inoffensive method will be devised and great credit and honor await those who do it.

BETTER PRICES.

Better prices, more than anything else, have put more life into our agriculture, and have brought about a disposition on the part of some to adopt better methods, and have emphasized the greater opportunity open to all farmers and the need of the general adoption of the best methods, such as are well known to the few. These include the following:

1. Conservation of fertility.
2. Thorough cultivation.
3. Drainage.
4. Growth of leguminous crops.
5. The use of cover crops.
6. The use of commercial fertilizers.
7. Crop rotation.
8. Selection of seed.
9. Spraying for fungus and insect pests.
10. Disposal of poor cows.
11. Use of pure-bred sires.
12. Feeding economical rations.
13. Protection against bovine tuberculosis.
14. Production of clean milk.
15. Keeping of farm business accounts.
16. Use of mechanical power and machinery.
17. Employment of labor throughout the year.
18. Maintaining a reputation for honesty.
19. The providing of home comforts.
20. Reading reliable agricultural publications.
21. Membership in active agricultural organizations.

For want of a better name this list may be called agricultural virtues. They spell success on the farm. They mean scientific efficiency. They lead to larger crops, with their natural effect on cost of living. They are our last resort. We cannot increase our production by occupying more virgin land, as has been our habit since the Pilgrims landed in 1620. We now have less tillable land per man than ever before. Our population has doubled since 1877. Our available land has not increased so fast, and much of it has decreased in productivity because of the way it was used—misused. Our only recourse now is to develop what we have. Every effort should be made to extend the adoption of these best methods. That the state is doing some effective work is shown by the 1,500 young men and women to-day studying agriculture in our state college and three state schools. Twenty years ago there were only fifty-two. We might also dwell on the important work of the state experiment station and the fairs.

WHEN LAND SOUR.

How to Tell When Soil Needs Lime.

Bulletin 137, of the Massachusetts Agricultural Experiment Station, discusses the rational use of lime and the distribution, composition and cost of lime. This is an important subject and Massachusetts growers should have a copy of the bulletin. Dr. Wm. P. Brooks, director of the station, gives in the bulletin the following three methods of determining what soils need liming:

"Those soils on which, when seeded, Timothy and Clovers fail, and where sorrel comes in largely together with red top, usually need liming. It should be pointed out, however, that the presence of sorrel is not a proof that lime is needed. This weed will flourish even in soils which have been heavily limed; but on such soils the grasses and clovers are likely to crowd it out, while on soils which are in need of lime, they are unable to do so.

"When soil is sour it will turn blue litmus paper placed in contact with it red. To carry out the test, make about a tablespoonful of the soil into a thin mud with pure water and after it has stood for a short time lay a piece of blue litmus paper on it and cover with the mud. Be careful not to handle the papers with the fingers. After about ten minutes remove the paper, washing it if necessary to show the color. If it has turned red, the soil is sour and needs an application of lime. Practically all druggists keep litmus paper.

"The most certain evidence of all as to whether lime will prove beneficial is afforded by a simple experiment which may be carried out as follows: Lay off two square rods in a part of the field to be tested which seems to be fairly representative and even in quality. To one of these apply twenty pounds of freshly slaked lime. After applying at once work it in deeply and thoroughly. A few days later apply to each plot liberal quantity of either manure or fertilizer, precisely the same amount to each. Plant table beets. If the soil is much in need of lime these will make a better growth upon the limed plot."

Stable Manure.

It is a well known fact that no system of crop rotation will restore to the soil the potash and phosphoric acid removed by crops. Unless these elements that are removed be returned in some manner, the soil will inevitably become too poor for a very ambitious man to cultivate. Common stable manure is conceded to be one of the best fertilizers for general purposes, and it is to be deplored that much of this valuable plant food be dumped away as so much trash, or exposed to the leaching rains even when intended for use. If it can make poor soil rich it can certainly maintain the fertility of rich soil. It is not insisted that the use of it would be advisable in all cases, since the fertility of the soil and the crop to be raised should be the governing factors, but it is safe to assert that all stable manure can advantageously be used in any general farming community.—H. P. Fishburn, Assistant Chemist, University Experiment Station.

"How is your mother this morning?" ask Mrs. Grey of the small boy who came with the milk. "She's better," he answered. "Can she sit up?" went on Mrs. Grey. "No," answered the literal youngster. "She sits down, but she stands up."—Woman's Home Companion.

It Fitted the Case.—The girl asked the polite salesman if he had good cheese. "We have some lovely cheese," was the smiling answer. "You should not say lovely cheese," she corrected. "Why not? It is," he declared. "Because"—with a boarding school dignity—"lovely should be used to qualify only something that is alive." "Well," he said. "I'll stick to lovely."

SPRAY

Don't Do A Half-Way Job

Efficient spraying depends on the machines you use. Field sprayers stand the test year after year. Thousands of users agree that no other spraying machinery does the work so thoroughly and conveniently. Ample power is supplied and liquid is thoroughly agitated. You are not annoyed by clogged strainers because brushes operated automatically keep them clean.

Field's Sprayers

A Machine Suited to Every Need

Bucket, Barrel, Knapsack Sprayers, 4-Row Potato Sprayers, High Powered Gasoline Engine Orchard Rigs, etc. Our Triplex mounted orchard sprayers represent the truly modern spraying idea. Work is done fast and thoroughly. The gasoline engines, ready mounted, can be taken anywhere to supply power for farm work. The Empire King is the best hand-power all-purpose sprayer. Potato Sprayers (adjust for wide and narrow rows) spray 4 rows thoroughly as fast as a team can walk.

Our Spraying Calendar, Formulas and Directions and Complete Sprayer Catalog are free. Don't buy till you get them. Write for them to-day. Address:

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WE want every reader of this paper who has a garden to test these six Specialties. We know they will give such wonderful results and make so many new customers for us that all we ask is for you to send your address at once and we will mail six sample packets FREE FOR TESTING.

60 DAY CABBAGE
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Earliest we ever saw. Heads quick. Try it and you will say so. Best variety for home gardens. It grows quick to a good size. Here is a cucumber to be proud of. Grows just right for pickling. This is a wonder for quick growth. Try it and you will say so. Try this lettuce and you will say it is the quickest grower on record. Most wonderful tomato we ever knew. Climbs trellises 12 to 20 feet. Fruit enormous in size.

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I want to send every little girl a Speaking and Sleeping Doll; will say "Mama" and "Papa". The prettiest, daintiest and sweetest Doll you ever saw. Elaborately and stylishly dressed; lace trimmed hat and gown; shoes and stockings; 17 ins. high. Pretty head, long golden curls. Will close its eyes. There is everything about this doll to endear it to the heart of its owner.

EXTRA PRIZE An extra prize for all little girls who write promptly. You want to get the EXTRA PRIZE sure. Net one cent of your money is required, so write today.



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Made famous by its dependability. The solid top and side ejection keep gases and powder away from your eyes; help quick, effective repeat shots. Rain, sleet, snow and foreign matter can't get into the action. The mechanism is strong, simple, wear-resisting. The double extractors pull any shell instantly; two special safety devices prevent accidental discharge while action is unlocked, and an automatic recoil block makes hang fires harmless. All Marlins are strongly made, finely balanced, accurate, hard hitting guns, and are the quickest and easiest to take down and clean. Illustration shows Model 24 grade "A" 12 gauge; it has all the features that make for a perfect gun.

Send three stamps postage today for our 136 page catalog describing the full Marlin line.

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Gives ample power for all farm uses. Only three moving parts—no cams, no gears, no valves—can't get out of order. Perfect governor—ideal cooling system. Uses kerosene (coal oil), gasoline, alcohol, distillate or gas. Sold on 15 days' trial. **YOUR MONEY BACK IF YOU ARE NOT SATISFIED.**

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A Free Trial Package is Mailed to Every-
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A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powderpaint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof and as durable as oil paint. It adheres to any surface, wood, stone or brick, spreads and looks like oil paint and costs about one-fourth as much.

Write to Mr. A. L. Rice, Manuf'r., 16 North St., Adams, N. Y., and he will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write to-day.

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Chas. A. Green's new book tells
how one acre in fruit can be made
to yield you more money than
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Give most power with least
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Our new 1912 model now
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will surprise you.



THE MIDDLEDITCH ENGINE CO.,
189 Meldrum Ave., Detroit, Mich.

To Make Our Farms Feed 200,000,000.

The man who commended the idea of making two blades of grass grow where one grew before would have been interested in the recent prediction of President Taft before the National Conservation Congress at Kansas City, that in fifty years our farms will be feeding 200,000,000 people where they are at present providing for less than 100,000,000. To do this they will have to produce double their present output of everything. Can they do it? "On the whole," asserted President Taft, "I think our agricultural future is hopeful, and I do not share the pessimistic views of many gentlemen whose statistics differ from mine and who look forward to a strong probability of failure of self-support in food within the lives of persons now living." Indeed, he declared, even with the prospect of a doubled population in 1960, "America will continue to feed her millions, and feed them well, out of her own soil." This is quite possible, intimates the Boston Transcript, because by intensive farming and a study of the market, the farmer has already learned to increase enormously his contribution to the world's supply of food; and truly, thinks the Richmond (Va.) Journal, "if the Conservation Congress can put off the day when America will cease to support its own population," its labor will have been well worth while.

Perhaps more attention is attracted by the speech of Henry Wallace, president of the Conservation Congress. In words far less optimistic than Mr. Taft's, this advocate of conservation alluded to the ruralist of recent years as "no farmer at all, but a miner, a soil robber," and he is quoted as having declared that the country "is facing a national crisis, which will soon precipitate famine and suffering throughout the land, unless 'improvement of the soil' ceases." The "back-to-the-town" movement began with the application of science to production, according to Mr. Wallace, as quoted in the press. Then he added: "The farm itself finally began to use improved machinery. The farmer hung his scythe in a tree and bought a mow; hung up his cradle and bought a binder. He used more horses, better tools, and grew more crops with less than half the labor. All this was natural, logical, inevitable. The older farming sections do not have so dense a population as of old simply because they do not need it as they did when farming under the old conditions. They could not use it with profit when they had to compete with town wages and town hours."

Big Birds.—In past ages much greater animals have flown. One reptile of the group Pterodactyl had a span of over thirty feet, which exceeds that of a racing Bleriot; this creature lived during the cretaceous period and flew as far as ninety miles inland. Certain dragon flies of the carboniferous era measured over three feet from tip to tip of their outspread wings. Under present conditions it would be quite impossible for these creatures to fly. The most natural supposition is that in the times when these creatures flew through the air, the atmosphere had a greater density than it has at present. This is the conclusion reached by Mr. Harle, in the estimation of this paleontologist, the existence of these great flying animals during cretaceous and carboniferous times indicates that atmospheric pressure at that time was greater than at present.—Scientific American.

Value of Green Manures.

As we have several hundred acres of land, only a part of which is rotated in truck crops each year, our practices in handling manure are essentially different from those followed in intensive market gardening. A small acreage devoted to onion growing and plant raising which does not concern the regular rotation, is given an annual application of well rotted manure, supplemented by chemical fertilizers at time of planting. Says Canadian Fruit Grower.

For strawberries, tomatoes, celery and cantaloupes we choose a field of clover sod, on which has grown a crop of cowpeas or soy beans. Possibly a heavy growth of mammoth clover is turned down after a top crop of seed has been taken off. If possible, we spread straw by machine, and the heaviest application that can be turned under with a sulky plow. The plowing is always done late in the fall, and we usually find all of the material turned under by the time we are ready to disk in April.

In this way we secure a quantity of nitrogen available throughout the season and also enough vegetable matter or humus to tide our crops over the most severe drought. This was demonstrated very nicely this season when our melon and tomato vines remained vigorous and green during dry weather, while many other grower's crops were practically a failure. We believe this question of humus life is quite as vital to the gardener as that of fertility and although consid-

erable vegetable matter is furnished in well-rotted manure, it is not usually furnished. And again, in process of decay a greater part of the nitrogen is lost through heating. This is particularly true if the supply accumulates around the city stables where piled loosely and not tramped down.

We supplement the green manures, and oftentimes the stable manures, with acid phosphate, usually broadcasted at time of planting, and with potash, which we are now obtaining in cob ashes hauled from nearby grain elevators and formerly purchased in muriate form. This is distributed at the time we put the straw or manure on the field by spreading on shovelful on top of the load in the manure spreader, usually two or three hundred pounds to the load. For the cantaloupes we use some nitrate of soda scattered around the plants at the time of setting.

Planting Trees for the Home.

Every dollar invested in plants, trees and flowers adds wealth as well as beauty to the farmstead. Trees increase the value of the farm and make life more enjoyable for those who live in the home. Says Farm & Ranch.

There is no more genuine pleasure than planting shade, nut and fruit trees, except the comfort of having them on the place. As trees grow and spread their branches and the foliage unfolds, develops and falls from year to year the owner of the place feels proud that he had civic pride enough to plant trees and esthetic sentiment enough to appreciate them after they were planted. Trees make the home brighter.

A place without shade and fruit trees is like a desert—exposed to the burning sun of summer and the cutting blasts of winter and without good cheer in the spring.

Skagway Farmer

"On the banks of the Skagway River, a mile above the city and opposite the railroad shops, is a model farm, perhaps one of the best in Alaska. This five years ago was covered with stumps and dense underbrush. To-day potatoes, corn, and other hardy farm products may be found growing there. Three years ago the owner secured a steam stump-puller from the States and used it, and now he has a model farm. The radishes, onions, lettuce, and peas raised here are superior to that shipped from the Northwest markets. Besides his farm products, the owner, Mr. Clark, conducts a thoroughly modern dairy, having eighteen Jerseys."

"Fairbanks has a town character in the person of 'Strawberry Pederson' because he is getting rich by raising strawberries. From his ten-acre tract he realized more than \$3,500 for one season, and he was the first man in the Tanana district to cultivate the berry. In 1908 he made enough to pay for the land, and made a record which is hard to beat anywhere. Few farmers pay for themselves the first year. Last year, after he had picked and boxed his last strawberry, he cleared \$3,000, the profits from a single crop. This year he enriched his soil with fish fertilizer, and will bank not less than \$3,500. The berries are luscious ones, and are the equal of the famous Kennebec berry of Washington."

In Front.

The Almost-Victim—You said these lots fronted New York. Why, they're at least thirty miles out.

Real Estate Agent—True, but what of it? See that glow in the sky? That's New York!—Puck.

Ears of Animals.

The hearing apparatus of animals is like that of human beings, but modified to suit the conditions of the animal's life. Deer, hares, and horses, like all animals whose life necessitates keen hearing, have ears shaped and set in the best way to catch faint or far-off sounds. The serpent has no ear-drums. The ear of the fish is a membranous labyrinth connected with the bladder by a series of little bones.

Though the sense of hearing is perfect only in the higher animals, even the animals that have no ears perceive sounds. Instead of ears they are supplied with fine nerves whose function is to note and to respond to every touch; nerves whose receiving centres are different from the centres of the purely tactile impressions. All animals, including insects, have an apparatus which enables them to distinguish the approach of an enemy.—Harper's Weekly.

For Summer Engagements Only.

Maybelle—"See the beautiful engagement ring Jack gave me last night." Estelle—"Gracious! Has that just got around to you?"

"Neglect of little things has ruined many fortunes and marred the best of enterprises."—Samuel Smiles.

Here's The ACME



The "ACME" is the only Harrow that cuts, crushes, turns, smoothes and levels in one operation and is a perfect weed exterminator and surface mulcher. There are no lumps or air spaces between the furrows after using the "ACME." Your soil is in the condition of a perfect seed bed. The subsoil has been properly packed and the top soil mulched to attract and conserve all the moisture. The coulters cut through to the under soil, leaving the trash that has been turned under, beneath the soil where its fertilizing qualities may benefit the growing crop. There are sizes 3 to 17½ feet wide. Each

ACME HARROW

Pays For Itself
Every 20 Acres

Each "ACME" is the greatest value offered. Any "ACME" will pay for itself on 20 acres the first year and will keep on paying big profits for a lifetime. Let us send you our combined catalog and booklet containing the service of articles by well known authorities on soil preparation, and describing the "ACME" line. Ask your dealer for prices, or write to

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FREE SEND NO MONEY

Just your name and address and we will send you a package of our New style Easy-to-Thread Gold Eye Needles and 12 Satin Finish Pure Aluminum Tackles, all post paid with Big 16 Page Premium List. You sell the Needles at 5 cts. a package and to each person that buys 2 Packages, you give a "Valuable Free." Your success is certain. When sold sent us the list and we will send you the Premium you select and are entitled to in the Premium List, order 1 once and get extra Presents Free.—Address
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SPRAYS the tallest fruit tree from the ground. Does the work in half the time. Sprays whitewash and cattle "dip." Used with bucket, barrel or knapsack. Always ready. Made of brass. Nothing to wear out or make trouble.

Warranted for Five Years
Write for special offer or send \$4.00. Expressage prepaid. Money refunded if not satisfactory.

The Standard Stamping Co.
342 Main Street MARYSVILLE, OHIO



Some Advice to Boys.

Written for Green's Fruit Grower by Robert S. Walker, Tenn.

Gossip.—In all social life there is a stagnated gossip belt that hovers low. Go lift your head above this deadly miasma if you would achieve greatness. Be broad-minded. Put away all selfishness. Ignore slander; it cannot do you injury, if you live honestly. The true armor is honesty and true manliness. It cannot fail.

Debt.—Beware of debt. Some authority has recently said that a boy should always shun debt. But I have found often difficult for him to secure credit. If a young man can acquire an education by going in debt, then open your arms and give it a glad welcome. But on the whole, debt should be shunned, for it is difficult to be very happy and chained with a burdensome debt. You cannot be independent and have a burdensome debt. Better make out on little or half so much and be free. Hence be prudent and act cautiously.

Get A Training.—With the present-day educational advantages, it is a shame for a boy to not acquire a training. The world is continually bumping the unskilled and untrained man. He is almost an outcast in the business and professional world. Cultivate your tastes; lean towards your natural inclinations; ascertain what you are best fitted to do, and what you really love to do, regardless of the money side of the question, then put your whole soul into the chosen trade or profession. Study it, be a master of it, ever remembering that there is always room for the expert at the top, no matter how over-crowded that particular trade or profession is reported to be, even by the sages. Never forget that you can do the world a lot of good in any honest work.

It matters little what you do,
Make a nation or a shoe;
For he who does an honest thing,
Is ranked in God's pure sight a king.

Habits.—It is far easier to subdue a race of wild Indians than to conquer a bad habit. By steeping our minds in pure thoughts, and by keeping busy at some useful employment, we are certain to form good habits. Beware of the first evil thought and the first indiscreet act. If you have a vile thought, suppress it before it becomes an act. Don't foster temptations.

Growing boys need no stimulants. Every alcoholic drink, every cigarette smoked, weakens you physically, mentally and morally, thereby lessening your chances for great accomplishments. Rather than form the liquor habit, it would be far better for you to take up your abode in the dark sepulchre. You cannot be happy and drink liquor; you cannot be anything.

"For shun, oh, shun the enchanted cup.
Though now its draught like joy appears,
Ere long it will be fanned by sighs,
And sadly mixed with blood and tears."

Jealousy.—Rejoice in the prosperity of your neighbors. It cannot hurt you. It will be a help to you. Has your friend accumulated more wealth than you? Don't say he has done so through dishonesty. Respect him; speak well of him. Suppress jealousy; it dwarfs the soul.

Affability.—Curt words always cut deep into the centre of the heart. Remember harsh words once uttered cannot be redeemed. It is distressing, yea more so, it is appalling, to meet young men, even those occupying positions who are non-accommodating and cynical. One cannot do the world much good with a cynical disposition. Doesn't it do you a great deal of good to meet an utter stranger, and feel when you have met him, that you have always known him? The pleasure is scarcely unsurpassable. This is what I call real affability. It is a great incentive to success. Hence, cultivate an affable disposition.

Humility.—Recently a popular speaking club in New York City offered a prize for a list of twenty-five of the most beautiful words in the English language. The words to be selected or judged from their beauty of sound and meaning. The prize winner's list was finally reduced to twenty-one words. I shall name them: Melody, Splendor, Adoration, Nobility, Sympathy, Heaven, Love, Hope, Divine, Harmony, Happiness, Purity, Liberty, Radiance, Honor, Joy, Faith, Modesty, Innocence, Virtue and Eloquence. There are many other words in the English language that are just as musical and have just as beautiful meaning, but I want to mention one in particular, and that is the word "Humility." Doesn't it sound beautiful to you? When this is applied to young men, it describes one of the most beautiful characters on earth. It is absurd to say that one cannot have great ambition or high aspirations and be humble. Although your aspirations lead you to the topmost round of the ladder of fame, you have hardly succeeded unless your life be imbued with humility. After all, it alone makes one great.

Freedom.—Don't go bind yourself to any political party. Be above the state of an African slave. Pledge not your liberty to any political party, but rather let principle be your guide. Only in this manner alone, can you keep yourself pure and maintain the freedom which you inherited under our republic.

Aspirations.—Set your stake high in this life; be not entirely contented with to-day's accomplishments. Have the highest ideals. Never lower them. Whether your ideal is ever reached, matters little, provided you do your best to attain it. When you work with an honest zeal and unfaltering energy, it matters little where you land, it will be on safe ground. For thus you have accomplished the best that was in you capable of development. You have done your duty. Remember the words of Henley:

It matters not how straight the gate,
How charged with punishment the scroll;
I am master of my Fate,
I am the captain of my Soul.

Success.—Free yourself at this moment of the delusion that success means piling up heaps of money. Most anybody can make money, but when it comes to building up a noble character—ah, there's where the difficult problem lies. Remember that success in its true sense, means achieving good in this world. Your life has been a dismal failure, if those that live after you, cannot say when you are gone, that the world has been made better by you having lived in it. This is true, although you may have accumulated thousands of dollars. Keep this fact ever firmly in your memory, and nail the words of Mrs. Stanley to your mast; He has achieved success, who has lived well, laughed often, and loved much; who has gained the respect of intelligent men and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it. Whether by an improved poppy, a perfect poem, or a rescued soul; who has never lacked appreciation of earth's beauty or failed to express it; who has always looked for the best in others and given the best he had; whose life was an inspiration; whose memory is a benediction.

"Who misses or wins the prize,
Go lose or conquer as you can;
But if you fall or if you rise,
Be each, pray God, a gentleman."

More Money in Vinegar.

During the past ten years, vinegar making has not been remarkably profitable for those who made pure vinegar from apple cider and sold to the wholesaler. The reason why good cider vinegar has been sold at such low prices at wholesale is that vinegars were made from distiller's waste products at a much lower price than cider vinegar could be produced, and consumers did not discriminate between the two, therefore the poor article sold as well and at as high a price as the genuine article.

Now all will be changed, for pure vinegar from apple cider, must be so labeled and there will be a penalty for labeling imitation vinegar as genuine. Consumers now pay the grocer twenty-five cents a quart for vinegar assumed to be cider vinegar. Some of the fancy advertised brands of vinegar sell at thirty-five cents per quart, while the manufacturer of pure vinegar has often been glad to get an offer of twenty cents per gallon or five cents per quart. The difference between five cents and twenty-five or thirty-five cents, which the middleman asks for good vinegar, is monstrous injustice. Unless good cider vinegar can be adulterated without discovery, those who make genuine cider vinegar will in the future be likely to receive more profitable prices. Dr. H. W. Wiley writes to a Rochester, N. Y., man as follows:

Regarding the question of first and second pressings, however, the board agrees that there can be no objection to the repressing of apple pomace as many times as desired without the addition of water, so long as that pomace does become heated or decomposed. The board has also reached the conclusion that vinegar made from dried apples, chops, skins and cores, is not entitled to be called "Cider Vinegar," but must be labeled in some manner to plainly show its source; that where water is added to cider vinegar, the label must show this fact.

It is my opinion that this answers the questions of chief interest to the manufacturers of cider vinegar. This information may be given by you to the trade.

Respectfully,
(Signed) W. H. WILEY,
Chairman.

Just an Overturned Lamp.

The great Chicago conflagration of 1871, which swept over some 2,100 acres, destroyed nearly 18,000 buildings, and was the cause of between 250 and 300 deaths, owed its success only to the fact that the previous evening the city's fire-fighting apparatus had been put temporarily out of commission by another giant blaze.

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A brand new, well made, easy running, easily cleaned, perfect skimming separator for \$15.95. Skims one quart of milk a minute, warm or cold. Makes thick or thin cream. Thousands in use giving splendid satisfaction. Different from this picture, which illustrates our low priced large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements. Our richly illustrated catalog tells all about it. Our wonderfully low prices and high quality on all sizes and generous terms of trial will astonish you. Our twenty-year guarantee protects you on every American Separator. Western orders filled from Western points. Whether your dairy is large or small, get our great offer and handsome free catalog. ADDRESS,

AMERICAN SEPARATOR CO., BOX 1121, BAINBRIDGE, N. Y.
When you write advertisers Please mention Green's Fruit Grower.



In the above photograph the man standing at the left by the pile of fruit trees has just received and opened a box of trees purchased from Green's Nursery Co., Rochester, N. Y. The man back of the box is a neighbor who, pointing his hand at the trees, asks where they were purchased and what price was paid.

Reply: "I bought these Cherry and Plum trees of Green's Nursery Co., Rochester, N. Y., and they cost me 25 cents for each tree."

Neighbor: "Is not that a remarkably low price for such good trees?"

Reply: "The price I paid is less than half the price that would be charged by tree agents for precisely the same product, but this is about the price I have been paying to Green's Nursery Co. for many years."

Neighbor: "I have long been buying trees of nursery agents paying from 75 cents to \$1.00 each for the trees and have never yet received such good trees as these."

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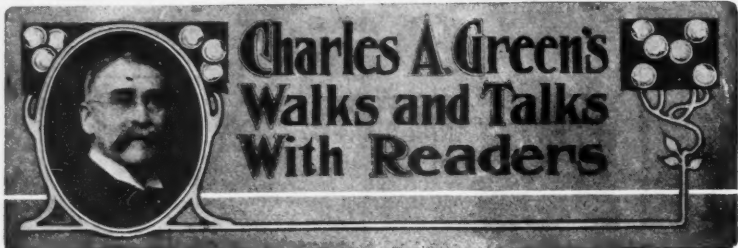
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"No one really fails who does his level best."—Anon.

ROCHESTER, N. Y., JANUARY, 1912

Notice that this issue of Green's Fruit Grower is devoted largely to the subject of beautifying the home lot or farm.

In looking over the various farm and horticultural publications I find but little said therein on the subject of beautifying rural homes. Here is an indication that this subject has not received the serious attention which it deserves.

The Editor of Green's Fruit Grower invites your considerate attention to various methods set forth in this issue of Green's Fruit Grower for beautifying farm homes and for planting the highways. This is a good season for making plans for the planting of vines, shrubs and trees about your dwelling. Do not forget that the well kept lawn itself is an object of great beauty and that there should be an expanse of unbroken lawn in connection with your home grounds. Therefore do not plant your ornamental trees and shrubs promiscuously over the lawn, but plant them on the borders and in the corners in waving lines, at one point a width of ten feet devoted to trees and shrubs, at another place five feet, at another place possibly thirty feet, depending on the size of the plot of ground to be ornamented, placing the trees on the outskirts, the shrubs next, and in front of them flowering plants or lower growing shrubs. Plant climbing vines on your porches and low growing shrubs around the cellar walls of your house or other buildings. Plant a hedge row or trees to hide your barns and other out buildings from the highway.

"How can a taste for the beautiful add to one's profit or revenue?" is a question which may be asked by some of the readers of Green's Fruit Grower. Here is an illustration: A farmer and fruit grower moved to a large city. He found a plot of land within the city limits which had many years before been laid out for a park, but the tract had been neglected, had grown up to a wild looking thicket and had long been offered for sale without a buyer having been found. This rural man fresh from the farm had an appreciation of the beautiful and enough imagination to see in advance how this property would look, after the removal of ruined fences and the clearing up of accumulated rubbish and undergrowth, therefore he purchased the tract, embracing several acres. The result was that he made a nice snug fortune out of this purchase.

Why did not others see the possibility of this tract which was easily transformed into a beautiful parklike residential section of a beautiful city? The reply is that the man who bought this property had cultivated his taste for the beautiful. He was appreciative and could look ahead and see the plan of the original owner and carry out that plan after the original owner had died. Others who might have made a fortune out of this tract lacked this sense of appreciation and had not enough imagination to see how the place would look after improvements had been made and the original plan was carried out.

A wise man has observed that shore property, that is land adjacent to lakes, oceans, rivers, ponds, will become exceedingly valuable in later years. Such land, much of which is now occupied with ordinary farms, cannot be increased. There is a limited supply of such desirable sites, but the demand in the future will feel that they must become the owners of such desirable property, on which to locate their fine rural residences, therefore when a man is looking for a farm he should bear in mind that he can afford to pay a higher price for a farm bordering a beautiful river, or a farm which has a brook running through it, or farm land located along the shore of lakes or of the ocean. There is another advantage in owning such land, for the presence of water is a protection against late fall frosts and early spring frosts, which are often disastrous to fruit.

It pays to cultivate a taste for the beautiful, not only in dollars and cents, but it pays for the reason that it adds to the enjoyment of living. The man who

goes through life without seeing the beauties of nature, lives only half a life. In a sense we can worship our Creator by admiring the beautiful things which he has created, the sunrise, the sunset, the clouds, the views of river, lake, ocean or mountains. The great beauties of nature are the vines, shrubs and trees. If you are not aware of this fact, visit a treeless prairie. When you return from a sojourn to such a treeless tract, you will have great admiration for the beautiful oaks, elms, maples, and other forest trees and for the vines and shrubs which spring up so freely on the borders of our woodlands and swamps and which may be planted so effectually on the borders of our home ground. After a return from the treeless prairie you will hesitate about setting the woodchopper at work destroying beautiful trees in our pastures, meadows and grain fields.

Winter Covering For Strawberries.

Yes, I cover the entire surface of the protection, deeming it necessary to cover the narrow space between each row as well as to cover the plants themselves. The object in this winter covering is not to keep the plants warm and should not be thick enough for such a purpose. The object in applying a winter mulch of straw or other material over the strawberry plants is to prevent sudden freezing and thawing, which is highly injurious to the plants. The action of the frost lifts up the plants somewhat and in this lifting, the lower roots are broken, and the vitality of the plants greatly impaired. Wheat straw or any other grain straw would be an ideal covering were it not for the fact that there are grass seed and seeds of grain in this straw. But if the grain straw is thoroughly shaken up and the chaff and seeds sifted out before placing it on the beds of strawberries, this process will save one hundred times its cost in weeding the strawberry bed next season. Do not apply commercial fertilizers and especially nitrate of soda to strawberry beds at any time other than in the growing season, but barnyard manure may be applied as a mulch and fertilizer during winter.

Feeding the Birds.—It has been proved over and over again that birds are helpful to fruit growers and farmers, therefore it is our duty to protect the birds and to feed them, especially during the winter months. A small handful of crumbs or fine seeds like wheat will be welcomed by the birds. I have known wild golden pheasants to come into my garden after food during the winter. Birds have some method of finding out where the food is located.

Kindness.—It pays to be kind and accommodating. Reward for such deeds for the most part lies in ourselfcontent after doing deeds of kindness, and we should not look for larger rewards, but I heard of a youth who gave up his sleeping car berth to an aged lady, who a few years later willed the youth over one hundred thousand dollars.

About Cherries.—Reply to S. S. Powers of Texas:—Yes, my opinion is that cherry trees will succeed on land where peaches have been doing well.

Where peaches succeed and do not fail to bear good crops of fruit more than one year out of four, I would consider peaches a good paying crop. Whether such a peach orchard would be as profitable as an apple orchard is another question. An apple orchard well cared for should stand for one hundred years, whereas a peach orchard in many localities is not expected to stand more than from seven to ten years, the peach being far shorter lived than the apple tree, but on the other hand the peach comes into bearing earlier than the apple and this is a great advantage.

Fall Apples Scarce.

Every fall there is a demand for apples ripe enough to be eaten. So far as my experience goes there is difficulty in getting an ample supply of good fall apples. Men who plant large orchards plant winter varieties almost entirely, probably for the reason that winter varieties can be handled more easily on a large scale than fall ripening varieties. For

this reason it may pay the small grower to plant more fall ripening apples, such as Fameuse, Duchess, Blenheim and Twenty Ounce.

Remember that there is a demand for eating apples at all seasons of the year, since there are so many people who feel that they cannot enjoy good health unless they eat an apple or two every day. If there is a long season when there are no apples in the market ripe enough to eat, there occurs a loss to the apple grower as well as to the apple seller, who is expected to meet the demand of the public.

Money in Trapping Fur Animals.

I am surprised to hear it stated that instead of a scarcity of fur bearing animals there are in this country more of these animals than there were twenty years ago.

I cannot believe this statement to be truthful, and yet there are many fur bearing animals even in the older part of this country. Many of these wild creatures have changed their habits owing to the pursuit after them by trap, dog or gun, and this may lead some people to conclude that they are almost extinct. I can testify to the fact that there are more foxes in Western New York than there were forty years ago.

I am interested in this subject for the reason that when I was a boy I was a great hunter, filled with enthusiasm for a gun, dog and boat. My first spending money was earned in hunting and trapping along the streams and in the woodlands twelve miles south of Rochester, N. Y. At that early date I felt sure that when I grew up to be a man I would spend all of my time in hunting and fishing, for I knew of no other way by which I could secure so much enjoyment. But my tastes of late years have changed greatly so that now I hesitate to kill any creature. I have come to recognize that life is a marvellous and mysterious gift from God, which should not be interfered with thoughtlessly.

Hunting Accidents.—Over one hundred and fifty men were killed last year in hunting accidents; many men were mistaken for deer or other game. These accidents teach us that man is by nature careless and heedless, willing to take chances. The student of human nature must see daily evidence of lack of caution in drivers of automobiles, street cars, railroad trains, and in almost every branch of human enterprise or experience. Although these hunting accidents are published all over the country each year and every hunter knows of the danger, still there are many who on seeing business agitation will fire at the disturbance, taking his chances as to whether there is present a deer or a human being. Many hunters are equally careless of their own persons and are often shot by the careless handling of guns. No gun should ever be handled so that if it were discharged it would injure any person or thing, but how to make a careful, cautious man of a careless, thoughtless being is a difficult problem to solve.

Appreciation of New Fruits.—In Iowa, where they must have hardy fruits, the good people are remarkably appreciative of Charles G. Patten and others like Peter N. Gideon, who have done notable work in producing new varieties hardy enough for the Iowa climate.

Col. Watrous in a recent speech said that while most of the men who were present at this convention might be forgotten a few years after their death, Mr. Patten's name would live long. He did not say how long.

In New York state we have less appreciation of the men who have devoted their lives to the production of new varieties of fruit which have proved worth millions of dollars to the state. Jacob Moore was one of those who deserved greater fame than he secured. He was scarcely able to live on the money he received for his valuable new fruits. The new fruit which brought him the most money of all, and probably as much money as all the other new fruits he secured put together, was the Diploma currant, which he put into the hands of Green's Nursery Company to disseminate on a royalty. Just about the time he should have received his reward from the Diploma currant royalty he died suddenly. Now his heirs are reaping a large reward which should in justice have accrued to the benefit of Jacob Moore himself.

Plum Trees Make Good Fillers for Apple Orchards, As do Cherry and Dwarf Pear Trees.

In reply to many letters, asking advice as to what kind of apple trees can best be used temporarily to fill in between apple trees planted regular distances apart with the idea of taking out these filler trees after they have borne a number of years, I will say that plum trees are desirable for such fillers for temporary planting between rows of apple trees.

In many sections of the country the fruit of plum trees are in demand. The plum is not excelled in productiveness by any fruit tree, therefore it must be profitable wherever the fruit is called for in the market. Plum also bears at an early age.

Peach trees have been largely used for planting between the rows of apple trees, and in the rows of apple trees, that is perhaps four times as many peach trees per acre as there are apple trees, but the peach tree is such a greedy feeder, and sends its branches out over such a wide space, I cannot think it is the best tree for this purpose. I should much prefer the cherry tree as a filler, for its roots do not extend so far as the peach, and it is more of an upright grower, occupying much less room in the orchard. We have many sour cherry trees, so-called, of the Montmorency or Early Richmond type, growing at Green's Fruit Farm successfully as fillers among other fruit trees. These cherry trees bear quickly after planting, and as they are trained with low heads we can often pick a large portion of the fruit from these low trees when standing on the ground. Cherry trees will continue fruiting when planted as fillers in an apple orchard many more years than will peach trees and are fully as profitable where there is a market for the fruit.

At Green's Fruit Farm we have used dwarf pear trees as fillers to be planted between rows of apple trees and in the rows. The roots of dwarf pear trees do not extend half as far as those of the peach tree and the branches of the dwarf pear do not extend half as far, therefore dwarf pear trees are far superior to peach trees or even to slow growing apple trees as fillers to be planted between the permanent apple trees of an apple orchard.

How natural it is to follow the lead of others or to follow the general custom. It is in this way that orchardists have come to plant peach trees between the rows of their apple trees and in apple tree rows almost universally throughout the country. It is only in recent years that it has occurred to planters of apple orchards to plant early bearing apple trees like King between apple tree rows as fillers. Let us now make a further innovation by planting the plum, cherry or dwarf pear as fillers between rows of apple trees.

Will A Cold Storage House Pay?—A. J. Parker of Ohio asks the above question to which C. A. Green replies as follows: It would not pay you having only four acres of orchard to build a cold storage house unless you were satisfied with a small one. But as I understand your plan is to build a large one so as to accommodate your neighboring fruit growers. Such a storage business as you suggest would require considerable attention and I would not advise you to undertake it. In cities where there are large cold storage houses competent men are employed to manage them and to look after the details which require considerable experience. To a certain extent the growing and winter storage of apples are two separate lines of business.

Economy In Burning Coal.

While it would seem to be economy to use chestnut coal rather than larger coal, this proves not to be true. The larger the lumps of coal the greater the economy, and yet the coal must not be too coarse.

For the kitchen stove, chestnut coal is generally used, but after the fire is well started stove coal can be used there with economy. In the furnace, steam or hot water heater, furnace coal about twice the size of stove coal should be used. It has been my practice to have a few tons of pea coal on hand. At night I throw a few shovels of this very small pea coal over the larger coal that is in the furnace, which banks the fire, checks the draft somewhat, and seems to economize the fuel.

A skillful person can run a kitchen stove or a furnace on nearly half the amount of coal that a careless or thoughtless person might use. In order to economize, the hot air draft must be continually thought of. At time the cold air damper must be raised as it is not enough to check simply the hot air draft. In my house furnace I take the outdoor air through a tight air box, but when a gale is blowing or when the weather is very cold I have to check and sometimes entirely close this outdoor opening for a few hours or a day. When I do this I open the window in the cellar to let in fresh air over the entire cellar, otherwise the air in the rooms above would not be fit to breathe.

The Stuff of Heroes.—"Now, then, men," cried the gallant captain, "fight like heroes till your powder is done, then run for your lives. I'm a little lame, so I'll start now."—Wasp.

"He was praising her hair to-day. I was so angry." "Why?" "Because I couldn't tell him she had borrowed it from me."—Louisville-Courier-Journal.

It Is True But He Doesn't Know It.

There are few people in this country who realize fully that America is a fruit paradise. There are few who realize how difficult or impossible it is for many other countries to produce such superior fruit as is so freely and economically produced in the United States of America. It is said that the English people never saw or never tasted of a peach that ripened out of doors until they received a shipment from the state of Washington at a recent date. This is a mistake for peaches have been sent from here to England and have for more than ten years past, but it is true that peaches grown in England must be grown under glass. These hothouse peaches cannot be compared in quality with those ripened out doors in America, and English grown peaches thus produced cannot be sold at a profit at much less than one dollar each. Think of this, you who live in a land where peaches can be grown at a profit at the price of fifty cents per bushel. It is not widely known that there is no other country in the world that will compare with this country in the production of apples and other hardy fruits. When we consider the growing of tropical fruits, such as the orange, lemon, pineapple and many others, America still leads the world. This is a great country for the production of nuts of almost every kind, from the cocconut to the pecan and peanut, but this fact is not fully appreciated. I appeal to the agricultural and horticultural press to make these facts more widely known. Let us keep telling our readers of the wonderful resources of the United States as a fruit growing country. In what other part of the world can you find train loads of the most beautiful apples ever grown starting out daily from various parts of this great country, and train loads of oranges, also train loads of grapes and peaches? There is no part of the world where such quantities, such a high grade, and such beautiful fruit is produced.

A Great Man.—True greatness does not depend on ability to make money or to paint great pictures, or in oratory or in wisdom. All the faculties alluded to are in a sense great but there are others still greater. I have in mind a noted writer who for many years preceding his death suffered from an incurable disease which caused weakness and continual pain. He had to live far away from his home and the locality he loved best, which caused him great sorrow. Life was a burden to this man, and yet he was one of the most cheerful of all and was constantly doing something to make the world brighter. This is an example of true greatness. Here is the prayer of this wonderful man. Read it and consider it well. The name of the man was Robert Louis Stevenson.

"The day returns and brings us the petty round of irritating concerns and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry.

Give us to go blithely on our business all this day, bring us to our resting beds weary and content and undishonored, and grant us in the end the gift of sleep.—Amen."

Farmers Think of This.

It is claimed that there are 8,000,000 farmers in this country, 7,000,000 of which have no supply of fruits in their gardens. This means that seven out of every eight farmers live from year to year without strawberries, raspberries, blackberries and grapes growing on the farm to supply and beautify their tables.

Considering this, how can we wonder that the girls and boys want to leave the farm for the city. If we want to keep our children on the farm, if we want to make the farm attractive for the wife and for ourselves, we must have upon our tables the attractive and healthful small fruits as well as peaches, pears, apples, cherries and plums. There are many farmers who have growing on their place no fruit trees worth mentioning, therefore are not only living without small fruits, but without the larger fruits. It must be that farmers do not realize how easy it is and how little it would cost, to set out a few plants of the strawberry, raspberry, blackberry, and a few grape vines, or to plant a few peach, apple, pear, and plum trees. Or having lived for many years without these delicacies, which are so necessary to health and are so helpful in making farm life attractive, they do not know what they are missing in not having an abundance of freshly picked fruit on their tables all the year around.

Farming and fruit growing are the most healthful pursuits known to man and yet the farmer and his wife do not live longer, and possibly not so long, as many who work in factories or stores. Possibly the reason for this is that so many of the farmers live entirely without fruit, depending largely upon meats, and mostly pork at that, for sustenance.

We hear of reforms of many kinds sweeping over the country, but what reform could be more helpful than one which would induce every farmer to have a supply of small and large fruits growing on his place. Some one may say: "I cannot afford to have these fruits. I am too poor." This is no excuse. You could more properly say you could not afford to try to get along without these fruits on your table daily. The planting of these fruits is a profitable thing to do. Fruit growing is the most profitable method of occupying the soil where the fruit is sold in the markets. But when the fruit is grown for the farmer himself and his family, this fruit pays a profit exceeding tenfold that of the profit of fruits that are sold. You can buy a grape vine for ten cents and allow it to trail over the sunny side of your house, and it may bear a bushel of grapes each year for a hundred years, or for twenty-five cents you may buy an apple tree which may keep your family in apples all winter for a period longer than that of a human life.

The Home Market.

A prominent Pennsylvania fruit grower has been shipping box apples to consumers for several years. His business has increased from year to year and he regards the plan as highly satisfactory, says National Stockman.

Another orchardist in Pennsylvania made a new shipment several years ago of box and barrel apples to friends in the cities. These friends were pleased and told their neighbors about the fine apples that had been purchased for so much less money than would have been possible at grocery stores. The business increased from year to year, notwithstanding that the orchardist, who produces very extensively, was doing all he could to discourage selling directly to consumers. He finally concluded to push this plan of selling and has issued a neat, attractive pamphlet advertising the splendid apples which he is growing. The plan will require more clerical help, but it will likely increase profits for the grower and decrease the cost of living for the consumer.

Maryland School for Boys.—Ed. Chas. A. Green:—We received several copies of your valuable paper. To my mind it is the greatest magazine published.—L. A. Stundevant, Md.

Effect of Grass on Roots of Trees.

That many kinds of trees, especially fruit-trees, flourish better when no grass is allowed to grow over their roots, has been long known to farmers. In some cases the effect of the grass on freshly planted trees is decidedly injurious, and may be almost fatal. This phenomenon has been studied at the Woburn Experimental Fruit Farm in England since 1894, and tho no perfectly satisfactory explanation of the action has been obtained, it seems reasonably certain now that bacteria are concerned in it. Spencer Pickering, who writes on the subject in Nature (London, June 6), tells us that experiment has shown that it can not be attributed to the abstraction of food or moisture from the soil by the grass, nor to the influence of the grass on the soil temperature or on the gaseous contents of the soil, and the formation of acid or alkali has also been excluded from the possible causes. The action may be that of a poison produced directly by the grass or indirectly through the agency of bacteria; or, as appears from the latest experiments, may be due to the killing by the grass of root bacteria that promote growth in some way. The writer says:

"The action is not confined to any particular grasses nor to apple-trees, but different grasses and different kinds of trees act and suffer, respectively, to different extents. The differences in the results, however, produced by different soils are much more conspicuous, especially in cases where trees are not grassed over until a few years after they have been planted. Tho the deleterious action of grass may generally be noticed throughout the country, many notable exceptions have been met with, and these can not be explained by any of the patent characteristics of the soils in question. Various pot experiments have been made which emphasize these observations."

"And you are really settlement workers?" interrogated the housewife as she handed each of the wanderers a wedge of pie. "Yes, mum," responded the dusty spokesman with a low bow, "we work every settlement we come to."—Chicago News.

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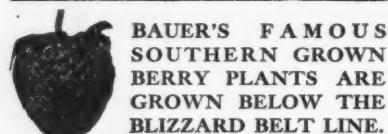
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Orchard Location.

The selection of an orchard site is not governed by any arbitrary rule. All farms do not afford the best soils and exposures for orchards. The owners of such as do not, are unfortunate, yet they should not feel discouraged to the extent of not planting trees and caring for them afterwards. Says Journal of Agriculture.

Some kinds of soils and surface presentations are preferable to others, as they are better adapted to this fruit and require less expensive preparation and in the after-care and treatment of the orchard. The most intelligent and experienced orchardists often differ as to the best location and exposure of an orchard, some preferring a northern slope, others an eastern, and yet others recommend a southern or even a western as best. We think, however, that the advantages preponderate in favor of a gentle eastern or northeastern slope, as orchards located on such sites suffer less in both soil and tree from the effects of heat and drought. An orchard with such an exposure will maintain its vigor and longevity better than if inclined to the west or southwest. This is especially true in States south of the New England group, where the summers are long, hot and dry, and where it is probable that the greatest injury to trees results from these causes. But, as stated above, all farms do not afford these most favorable sites, especially near the home, which is the most desirable location for the family orchard. Thus the planter will often be forced to forego such a location and take his chances where the natural conditions are not so favorable. If possible, the site should be elevated above its immediate surroundings, thus giving a free circulation of air; and it will also be of great aid in guarding against late spring frosts, so fatal to young fruit at the blooming season.

ALMOST ANY SOIL WILL DO.

Apple trees will thrive and do well on almost any soil well prepared, but the different kinds of soil may require different treatment and after-care.

A loamy soil is naturally rich in plant food, hence will need little, if any, manuring in its preparation. But it should be deeply stirred and thoroughly broken up by sub-soiling. This loamy soil is what may be termed free soil, as it seldom becomes compacted, even by abusive treatment.

A clay soil is the most difficult to prepare, and often requires manuring as well as thorough plowing, reworking and sub-soiling. It should be also frequently stirred during the summer months and especially as soon after each rainfall as is practical, to prevent it from baking and becoming compacted. This becomes even more important in seasons of long and continued drought.

Sandy soils are generally lacking in necessary plant food. They also have the objection of losing such fertilizers as may be added, by the leaching of the rainfall.

The wood growth on loamy soils will be strong and vigorous, but may not be sufficiently matured to withstand the freezing of the more vigorous winters. Clay lands are not so apt to produce such vigorous growth and orchard trees on such lands will be harder as to winter killing than on most other soils. With a free subsoil underlying it, a loamy clay soil will probably yield the best results, especially if it be well prepared by thorough culture and subsoiling before planting the trees.

Timber lands or lands on which forests have formerly grown, if having the proper exposure and drainage, are preferable for orchard sites. Such lands contain all the elements of plant food necessary to insure a good and sufficient wood growth and fruitfulness. Fruit grown on such lands will rank first class in size.

All orchard lands should be thoroughly surface drained and subdrained. No orchard can endure for a great length of time with stagnant water either on the surface or within the soil. All surplus water from excessive rainfall or from other causes should be promptly removed by either surface or sub-drainage.

Reasons for the Home Orchard.

The home orchard gives tenure to the cultivator of the soil; it makes farm life more permanent; it endears the boys and girls to the home. The pleasure and enjoyment derived from cultivating the orchard are not to be lightly treated. Every member of the family soon learns to reverence the orchard and often the different trees are known and their bearing qualities fully appreciated. When the clouds are low and threatening and the temperature indicative of a cold wave in the spring, all are solicitous for the welfare of the fruit trees. Says Farm and Ranch.

It is a sacred privilege that the home owner has, and one that the renter craves, to plant an orchard and gather choice

fruits as a reward for his labor. No other part of the farm is more responsive to good care, no other acreage gives better promise for labor, no other work is so cheerfully performed. It is a pleasant duty to cultivate, prune, spray and bud the trees and gather fruits.

There are few farms where an orchard site cannot be found. There are so many choice fruits of wide adaptation, and so many varieties of local requirements that a legitimate excuse for not having an orchard is hard to render. Nursery trees are cheap and the labor of setting an orchard not expensive. Why deprive your family of fruits?

Deep Snows and Orchards.

When snows cover the ground for long periods, there is danger to the fruit trees and shrubs. The supply of food for the cottontail is covered, and he is driven to the trees. Many small trees will be injured the present winter and owners must be vigilant to avoid damage. The shotgun and the trap will do something to thin out the rodents, but they cannot be depended upon for perfect protection. Feed may be supplied by throwing down apple trimmings. Poison may be used, strychnin in sweet apples. Also there are fifty applications for the bark which cause the enemy to avoid the trees which have been treated. Grease, blood, fetta—each has its advocates. If veneer protectors are put on now press them down well into the snow and see that they are long enough so that, if drifts form about the trees, the rabbit will not get free passage into the tops. Large trees are practically safe from this enemy, because he cannot stretch his mouth to fit them, but the small tree makes his opportunity. Says the Homestead.

LOOK OUT FOR THE RABBITS.

Every man who has trees where there is danger of rabbit gnawing should be on guard right now and ward off the certain attacks. But if trees are neglected, or if injury is done after our best possible efforts, trees are not necessarily lost. A young tree will stand a good deal of gnawing and still come out all right in the end. But just as soon as the thaw comes, and you can get at the fresh earth, then is the time to help them recover from the damage. Go about with a spade and mound up dirt about each injured tree, covering all the wounds. Pack the soil well so that it will not settle away and leave the scars exposed to sun and wind. If this is well done and the earth left in contact with the bark for one summer, the wounds will be healed, even if the injury extends all around the tree. And it is cheaper to save the tree you have than to grow a new one.

The Crosby Peach.

This peach has been highly praised by experts in Ontario and some parts of New England, while in some other parts of the country it is but little thought of. We have asked J. H. Hale, of Connecticut, for his opinion. Says Rural New Yorker.

The Crosby peach is a variety that has some points of superiority over almost all others in the country, and yet it is generally despised and unappreciated, except in northern Massachusetts, southern Vermont, and New Hampshire, and in portions of Ontario and some sections of Iowa and Nebraska, where it is extremely profitable. It is hardy in bud and fruit where many others fail entirely. It is the sweetest and richest in flavor of any of the yellow varieties, and has such a small pit that you get a whole lot of peach, even though individual specimens are not very large. It is always inclined to over-bear, and consequently is generally small in size; but properly thinned, then thinned over again, and with a good deal higher feeding than is required with most varieties, some wonderful results can be obtained. The dull woolly appearance can almost entirely be grown off by liberal thinning and increased size of peach. It will astonish every peach grower in America to be told that the largest size peach that I ever saw in my life was a Crosby; not a single specimen either, but hundreds of them. The trees were on very rich land and only about three hundred specimens were allowed to each tree, the trees being 10 years old. Still I should never put forth the claim that it was a large nor an attractive peach, but it has many points of merit not to be despised. J. H. Hale.

Isaac Brown, of Otselic, picked seventy-seven perfect apples from a branch only two feet long.—Locke Courier.

It is stated that as the result of a trick played on those who favor no-license in the town of Junius, there was no vote on the excise questions there this year. The man who secured the signers for the petition did not file it with the town clerk and therefore no vote can be taken until another year.—Penn Yan Chronicle.



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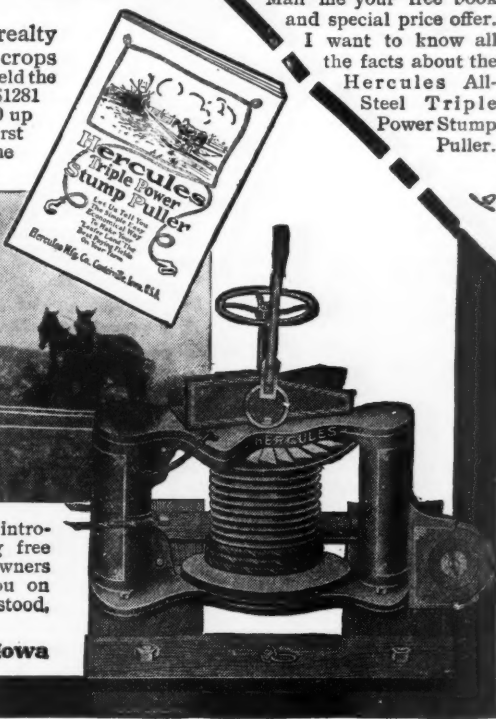
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THE REVIVAL OF CHERRY GROWING.

Cherries One of the Most Profitable Orchard Crops.

Ten years ago it would have been difficult to find a cherry orchard in the eastern states. Forty years ago cherries were practically unsalable. You may ask why they should have been unsalable at that time, but this question cannot be easily answered. Peaches forty years ago were also in little demand, and apples and pears, such as they were, could not be sold so readily as at the present time. It looks to me as though the public has gradually been learning the value of fruit as a food, and that forty years ago but little fruit per capita was consumed as compared with that consumed at the present day. Further than this, the average family is better able to buy fruit now than the average farmer was thirty or forty years ago, on account of more liberal wages paid and the greater wealth of the average citizen.

Of late years cherry orchards have been planted embracing large acreage, not only in the far west but in the middle and eastern states, and these orchards have proved remarkably profitable.

Cherries are among the easiest to produce of all fruits. The cherry tree resists even the San Jose scale. The tree is hardy and there is no insect to destroy the foliage or the fruit at Green's Fruit Farm. We do not have to spray the cherry trees. The cherry will produce heavy crops of fruit without any cultivation, yet we get larger fruit by cultivation, and consider it profitable to cultivate and keep the soil fertile.

The cherry tree comes into bearing at an early age and is usually an annual bearer. The amount of fruit which can be secured from a moderate sized cherry tree, to say nothing of a large tree, will surprise the inexperienced. The cherry is a tempting fruit and comes at an early season when fruits are scarce, the peach, pear and apple having not matured at that date.

HELP FOR CHERRY PICKING.

One reason why the cherry has not been more largely grown is that much help is required in picking, but those who have planted large cherry orchards report that they find no difficulty in getting pickers. Here is a notable fact which fruit growers can depend upon—Wherever there is work to be done and good prompt pay, workers will learn of this fact and will migrate to that spot where their services are required. Surely you cannot depend upon enough pickers in your immediate locality to pick the fruit of a cherry orchard, but by visiting a nearby city or large town and announcing the fact that laborers are wanted to pick cherries or other fruit, there should be no difficulty in securing necessary help.

I know of a friend who goes to Buffalo, distance of 100 miles, every year to secure a carload of foreigners to help gather his crops. There is no difficulty about boarding these men. A roughly constructed building covered with tar paper or something of that sort will house a large number. They are usually capable of cooking their own food.

While the cherry has been found to be a profitable orchard fruit, I shall claim that its greatest value is in the kitchen garden, or at the rear of the lawn, where it will thrive and bear bountiful crops of toothsome fruit. The cherry tree is highly ornamental in its sweet blossoms and in its brightly colored fruit. Do not complain if the birds carry off a few of you cherries. As for myself, I am willing to plant a few extra cherry trees so as to allow the birds to eat all they desire in order to have the pleasure of being surrounded by song birds, and in having them feel at home on my premises. He is a wise man who protects bird life in this age of destructive insects. Do not fail to plant a few cherry trees in your garden or at the rear of your town or city lot.

Failure in Growing Apples.

When farming in Canada, a tree agent called at my home. Says Prof. Thomas Shaw of Minn. With the accustomed hospitality of the time I asked him to take dinner. After dinner we walked across a certain portion of the farm. As we did so he said, "here is a fine place for an orchard." Without looking carefully into the question I made up my mind to plant that field in orchard, but not just then. A year or so later it was planted. To make sure that the trees would be planted to my mind, I put in every tree with my own hand. On twelve acres of the ground the trees did well, but on the other ten acres they were nearly all dead within a year. The explanation was that the water of a stream hard by overflowed the ten acres and it did not the higher ground. I did not like the idea of being thwarted thus in my plan and therefore planted the trees again. The result was similar. This brought me to my senses. I began to study soils in relation to apple growth and soon ascertained that a rich black loam subject to annual overflow was no place for planting such trees.

What is Your Life.—President Hadley of Yale once said to his students: "We think of life as a goblet to be drained; is it not, rather, a measure to be filled?" "Dear teacher," wrote little Edith's mother, "please excuse Edith for not coming to school yesterday, as she fell in the gutter. By doing the same you will greatly oblige her mother."—Youth's Companion.

How to Take Care of the Orchard After it Comes into Bearing.

By S. Y. Thornton, Missouri.

I have 80 acres of apple trees that were planted in 1891, 1892 and 1893. I made the common mistake of planting too close together. I planted 25 feet apart each way and I think they should be 30 feet one way. After my trees were eight years old I seeded the land down with clover. I pastured my orchard with hogs till they commence eating the apples off the trees. I am of the opinion that hogs are an advantage to an orchard after the trees get large enough so they will not bend them over by rubbing against them. The hogs are benefitted by the clover, they destroy many insects on the ground and under the surface. My trees are headed low, so as soon as the hogs begin eating apples off the trees, I take them out till after the apples are picked, then I put them in again and they eat the wormy fruit all the fall and winter and of course eat many worms. I do not prune very much after trees get to bearing, having attended to that closely each year when the trees were small. I only cut off water sprouts and broken limbs. I prefer pruning after the sap begins to rise, as the cut heals over more readily and there are not near as many water sprouts forced out as if pruned in winter or early spring. I usually finish pruning about the time blooms come out.

I spray once before bloom is open and again soon after they drop, and two or three times afterwards at intervals of about two weeks.

An apple orchard containing a good stand of trees 12 to 15 years old that have been properly cared for and headed low with the lower limbs bending over with their loads of fruit to the green sward below and the higher limbs lapping over those of the adjoining trees is a sight that is pleasant for the owner to look upon, and an attraction to the buyers that are sure to hunt them up, and the profit from such a crop is many fold greater than that of any other crop from the same land.

Apple the King of Fruits.

"One of the most common mistakes made by the apple grower," said Col. Brackett, "is in planting too many varieties. Having obtained a list of varieties that have been found by actual experience to be adapted to the locality where the orchard is to be planted, a careful selection from this list, of a very few of the best should be made; the fewer the better, providing the varieties chosen are such as will meet the requirements in all points.

"Out of a list of ten or fifteen varieties there must, of course, be a few superior to others in desirable qualities. If so, why plant the less desirable ones? The

fewer the number of varieties the less will be the trouble and expense in handling the crop."

"Every locality has its favorite apple or apples, which have been well tried out. In the list of varieties which are generally recognized as leaders, commercially, the most prominent and most widely grown are perhaps the Baldwin, Ben Davis, Jonathan, Northern Spy, Rhode Island Greening, Roxbury, Tompkins King, Winesap, Yellow Newtown and York Imperial. All of these are grown more or less extensively in the various sections of the country to which they are adapted."

Marketing fruit is just as important as the growing of it. Great quantities of the finest fruit go to waste every year because the grower fails to put it up in proper shape or to get it to the right market at the right time.

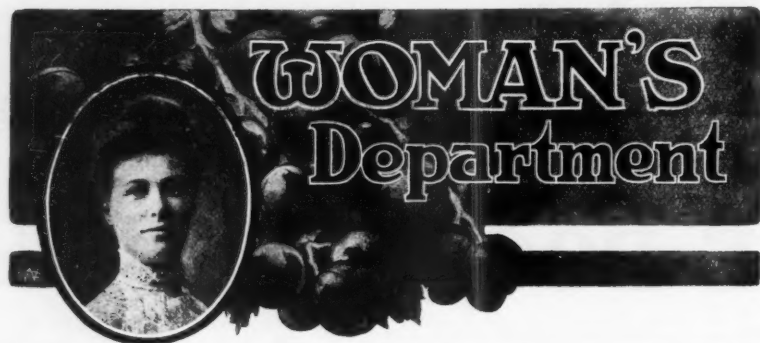
RED FANNY APPLE.

Origin in Lancaster, Pennsylvania.

The Fanny apple is one of the many apples of good quality that originated in Lancaster County, Penn. The original tree grew on the farm of Miss Fanny Eshleman, east of Strasburg Borough. The variety was first propagated and introduced by Warfel & Herr in their nursery near Strasburg, about fifty years ago. John Scholes, then a young English gardener, who obtained his early training in the shadows of the Duke of Devonshire's properties, was one of the first to appreciate the fine red apple. Being employed by Warfel & Herr as principal propagator, Mr. Scholes had no trouble to induce the newly formed firm to include this apple in its list. Dr. I. H. Mayer, in N. Y. Tribune Farmer.

There are few Fanny apple trees in Lancaster County. Warfel & Herr sent trees to New York State, and Charles Downing became acquainted with the variety. The growth of the tree, and especially the Fanny apple itself, by its appearance and quality, appealed to the fine taste of Charles Downing, and he strongly recommended the propagation and planting of this variety.

The agricultural interests of foreign countries buy nearly \$100,000,000 worth of American manufactures and other products for use in cultivating the soil, while about \$50,000,000 worth of foreign products are annually imported into the United States for use upon American farms. The foregoing summarizes certain information recently compiled by the Bureau of Statics, Department of Commerce and Labor, and refers more especially to those classes of merchandise having their chief, if not exclusive use in the farming industry and does not include articles in general use, such as clothing, furniture, and miscellaneous manufactures.



Aunt Lydia's Household Hints.

Written Especially for Green's Fruit Grower.

If it is desired to scour the steel knives and forks take them out of doors and thrust them into the ground. A few minutes work with each will make them look like new.

When using the hot water bottle for cold feet or upon the back, try tying it upon the cover of an empty shoe carton. This will keep it in an upright position.

Every kitchen ought to have a good comfortable rocking chair. There are many odd minutes during the course of a day that the tired housewife can occupy it to good advantage.

Have a scrap basket in the kitchen, and make a practice of burning its contents every morning. It is a nuisance to lift a stove cover every time a bit of string or paper has to be thrown away.

Do not throw away the old underclothes. Cut out the large pieces, wash them thoroughly, and keep in a convenient place. A good assortment of clean rags is a real comfort in house-keeping. There cannot be too many.

After stockings are too far gone to be worn more, they make excellent holders to use around the kitchen stove. Fold them into a square, tucking the foot smoothly inside, and stitch across several times on the sewing machine.

For the kitchen windows, or where it is desired to shut off a view and still let in light, use two sash curtains one above the other. These are very convenient, for the upper section will light the room and the lower can well protect the eyes from the sun while reading.

Take an empty tin can or a small pail and punch a dozen holes in the bottom with a nail. Into it put all the scraps

of soap, and when washing dishes pour the hot water through it. Keep it near the sink and save money.

Take time to think. When a dozen tasks seem to be crowding one upon another, just set down for five minutes and plan. Decide what ought to be done first and then do it. Don't get excited, for that is what makes life hard and is sure to bring on nervous disorders.

Women who are still lifting the old style iron teakettle many times every day ought to get wise and throw it out to the junk heap. Life and strength is too precious to waste in lifting so much dead useless weight, when agate ware is so reasonable.

The Home Coming.

Written for Green's Fruit Grower by Frank I. Hanson.

Some one has said that the best part of a visit is getting home, and it is true in the majority of cases. Let us consider, for example, the farmer who has perhaps made his yearly visit to the city.

His head is just ringing with the many noises of congested population and commercialism. He is fairly lame from dodging his way across the crowded streets. A ferocious bull in an open field would have small terrors, but the many street cars and honking autos coming and going and the many people, all hustling with a stiff-necked intensity after their own business, have put him into a state of nervousness that sends the cold shivers down his back.

His board has been no small cause of complaint. He has met some pretty good food and some otherwise—mostly otherwise. On no occasion has he thought of "back home" so strongly as at meal-times. Broadly speaking he wonders how the people can live the year round upon such fare.

My word, but the nights! Such a confusion and racket, when all honest people ought to be wrapt in slumber! He wonders what the good people of the old home town would say at such doings. He decides that some have been in bed all day, and are just waking into hilarity. Surely, thinks he, everybody is a fool or has gone mad to so abuse the hours that nature intended for precious rest.

Finally comes the time for going home. What a longing takes possession of him! He carefully counts his purchases and settles back in his seat while the swiftly moving train, to his mind, merely creeps. When the home station is reached he feels like standing on the steps and pronouncing a benediction upon the familiar faces and scenes.

Then comes the ride home in the comfortable buggy behind the best horse on the farm. The children are lined up before the gate to give him a royal welcome, and over their heads, framed in the old doorway, he sees a smile of welcome upon the sweetest and most patient face in all the world—his wife's. His faithful dog leaps shoulder high and shows his delight with a series of joyful barks.

Ere long the tormenting collar and Sunday shirt is replaced by an outfit that means solid comfort. Slippers and overalls puts on a smile that just refuses to leave. Then comes supper, such as only "mother" can prepare when she cooks for a special occasion. His heart swells with pity for the people he left behind.

When he gazes to the westward, where the gold and rose tints of sunset meet the brow of the distant hills, and drinks in the beauty of the green fields and growing crops, he realizes as never before that the best part of visiting is the home-coming. God bless the farm home.

Universal health would leave half the world with nothing to talk about, and probably soon equalize matters by reducing the other half to nervous prostration by the necessity of supplying all the conversation. It would very likely eliminate human sympathy as rapidly as it eliminated hypochondria. For illness is the universal bond of understanding, and one touch of dyspepsia makes the whole world kin.

Paper Bag Cookery.

Green's Fruit Grower advises the housewife to look into this new method of cookery. Stout paper bags greased on the inside are desirable for cooking inasmuch as the flavor of the article cooked is largely retained by the nearly air tight bag.

Long ago it was discovered that game or poultry encased in a covering of moist clay, the feathers being left on entirely except the tail feathers and possibly the wings, when baked in the oven or in the ashes of a camp fire possessed a flavor not ordinarily secured by common methods of cooking. When the clay cover is removed the skin and feathers of the bird comes off clean. Articles cooked in bags closely resemble those cooked in a case of moist clay. We advise you at least to test this method.

What We Eat.—"Mrs. Cooley says New York is the most immoral city in the country because its residents resort to restaurants and eat delicatessen. Health and morality, she says, depend upon food. "We literally shovel tons of material into our delicate stomachs. In a life time of seventy years a woman eats thirty oxen, 100 cows, 200 sheep, fifty pigs, 30,000 oysters, 24,000 eggs, four and one-half tons of bread, etc. The quality, therefore, ought to be looked into. Yet we tranquilly devour food colored with coal tar dyes and preserved with chemicals and poisons. We buy and we eat these daily."

Many mothers and fathers all over the country will agree with Mr. Homer Seely, president of the Iowa State Teachers' College, who denounces the social purity lessons in public schools. He declares that the introduction of such courses would be evil rather than good. Destroy a child's feeling of modesty, he says, and the strongest protection in social life is gone. He hopes that the safe and sane will prevail where such lessons are introduced. The saving of the masses by wholesale lecturing and popular instruction can not be accomplished, he says, and the fathers and the mothers are the ones to take the responsibility, and not the teachers.

Will women ever give up the corset? Baroness Rosa Posse, head of the gymnasium which bears her name, says that it won't be many years before the article now regarded as so necessary by most women will be discarded for good. She says: "Look at the difference in the dress now and in our grandmothers' days, when small waists and ill health went hand in hand. Now the whole tendency is toward the Greek type of beauty, and the waists have expanded marvelously. Naturally, with the circulation better, the digestion is better, the dispositions are better, and consequently we have a stronger and a more handsome lot of women."

About seven acres of farm land are being fenced off from the Clinton B. Struble farm, near Branchport, on which Mr. Struble and Wendell T. Bush will establish a guinea fowl farm, the second of its kind in the state.—Penn Yan Express.

Will J. Curtis brought to our office six apples in two; in other words, there are three apples in one, and the three perfectly joined together. And the strange part of all is, the tree on which these apples grew is full of the same freak apples.—Mt. Olivet Tribune.

The pheasants are not being shot off as badly this year as in former years as they are more shy. Many hunters think that because they do not find the birds when they go out hunting that the birds are becoming scarce, but the farmers say that the number is greatly increasing over last year.—Newark Courier.

Divinity fudge requires three cupfuls of granulated sugar, a cupful of corn syrup and two-thirds cup of water. Cook to the soft ball stage. After this syrup has cooked for twenty minutes, make another syrup with half a cupful of water and a cupful of granulated sugar and cook like the first. Turn the first syrup over the stiffly beaten whites of three eggs and beat briskly and continuously until it stiffens. Then turn in the contents of the second pan, following this with a cupful of broken nut meats. Turn the mass onto buttered tins and cut in squares when cool.

Untimely Tommy.—Mother—"Tommy always eats more pie when we have friends at dinner."

Visitor—"Why is that, Tommy?" Tommy—"Cos we don't have no pie no other time."—New York Evening Mail.

"A downright fact may be briefly told,"—Ruskin.

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Do not delay. Write at once for terms and free outfit of Guaranteed Hosiery for men, women and children. All styles and grades. Guaranteed 4 months or replaced with new pair. Best proposition ever made. Big seller, fine profits, good repeater. Get busy and write today. Do not miss this big chance. Send no money—a postal will do.

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Send us a sample of your hair and we will mail you this beautiful 22-inch human hair switch to match. If satisfactory send us \$1.50 any time within 10 days, or sell it to your friends for \$1.50 each and get yours absolutely free. Extra shades a little higher. Souvenir catalog showing latest styles of fashionable hairdressing, etc., on request. Enclose 5c postage. Marguerite Coll, Dept. 187, 115 S. Dearborn St., Chicago

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Patterns for Women Who Sew.

3308—Girls' Dress with Gimp. 5 sizes, 4 to 12 years. Age 8, needs for dress, 2 1/2 yards of 36-inch material, 1/2 yard of 27-inch contrasting goods. For gimp, 1 1/2 yards of 36-inch goods.
3421—Misses' and Small Women's sailor Dress. Closed at Back, Five Gored Skirt. Cut in sizes 14, 16 and 18 years. Age 16 requires 4 1/2 yards of 36-inch material, 1 1/2 yards of 24-inch contrasting goods.
4858—Girls' Dress—5 sizes, 4 to 12 years. For 8 years it requires 2 1/2 yards of 44 inches wide; 2 3/4 yards of braid.
5132—Ladies' Nine Gored Skirt. 8 sizes, 22 to 36 inches, waist measure. Width of lower edge for 24 waist is 3 1/2 yards and requires 3 3/4 yards of 44-inch material.
4047—Ladies' Shirt Waist. 7 sizes, 32 to 44 inches, bust measure. For 36 bust it requires 3 1/2 yards 27 inches wide.
5678—Ladies' Waist With Revers and Plaited Peplum. Cut in 6 sizes, 32 to 42 inches bust measure. Size 36 requires 2 1/2 yards of 36-inch material, 1/2 yard of 24-inch contrasting goods.
5160—Ladies' Apron With Bib. Cut in one size and requires 2 1/2 yards of 27-inch material.
3968—Ladies' Dressing Sack—7 sizes, 32 to 44 inches bust measure. For 36 bust it requires 3 1/2 yards 27 inches wide.
5682—Ladies' Six Gored Skirt with Side Flounce Sections. Cut in 5 sizes, 22 to 30 inches waist measure. Size 24 measures 3 1/4 yards around lower edge and requires 3 1/2 yards of 44-inch material.
1624—Boys' Collarless Sack Night Shirt. 11 sizes, 6 to 16 years. For 12 years it requires 3 1/4 yards 36 inches wide.
5373—Ladies' Waist Closed at Front. Cut in 6 sizes, 32 to 42 inches bust measure. Size 36 requires for waist, 2 1/2 yards 36 inches wide, for gimp, 1 1/2 yards of same width.
5329—Ladies' House Dress Closed At Left Side of Front and With Seven Gored Skirt. Cut in 7

sizes, 32 to 44 inches bust measure. Size 36 requires 5 1/2 yards of 36-inch goods without up and down.
4773—Dolls' Set. 7 sizes, 14 to 26 inches long. For 18-inch doll it requires 1 1/2 yards 27 inches wide, dress; 1/2 yard 27 inches wide, cape.
5681—Boys' Pajamas with High Neck Having Standing Band or Rolling Collar or With Low Neck Having Stole Band. Cut in 7 sizes, 4 to 16 years. Age 10 requires 3 1/2 yards of 36-inch material, 1/2 yard of 27-inch contrasting goods.
5329—Ladies' Seven Gored Skirt. 6 sizes, 22 to 32 inches waist measure. Width of lower edge for 24 waist is 3 1/2 yards and requires 3 3/4 yards 44 inches wide.
Patterns 10c. each. Order patterns by number, and give size in inches. Address Green's Fruit Grower Co., Rochester, N. Y.

New Candy Recipes.

College girls are now priding themselves on "Comanches," which they achieve by using a cupful of corn syrup, a cupful of brown sugar, two cupfuls of white sugar, half a cupful of milk, two squares of chocolate and a piece of butter the size of an egg. Boil the syrup until it spins a substantial thread or stiffens when dropped in cold water and turn into shallow buttered tins. Then make another syrup of two cupfuls of brown sugar, two cupfuls of white sugar, a cupful of milk and a piece of butter the size of an egg. Cook like the other syrup and turn in a large cupful of finely broken or coarsely chooped nut meats. Turn this mixture over the other. When the candy is cool enough mark it into blocks.

For walnut caramels, make a syrup of half a cupful of corn syrup, a pound of brown sugar, half a cupful of milk, two level tablespoonfuls of butter and three squares of unsweetened chocolate. Cook it until the soft ball stage is reached, stir in a quarter of a pound of broken walnut meats and pour into a buttered tin. When it is cool mark into blocks.

Bird Lore.

My uncle's brother is quite a bird student, and one of his amusements is to feed the many different birds that have been in the habit of wintering on his farm. He arranged a wooden platform about two by four feet, with a small rail around it, to prevent the food from falling to the ground, and attached this to the outside of the window-sill. After having cracked nuts (thirteen bushels cracked during the winter), including walnuts, hickory nuts and butternuts, he would raise the window about three inches, or just enough to allow the nuts to be scattered over the platform and, after lowering the window, would wait for the birds to alight, and then watch them eat and pick the nuts. They would soon fly to the platform from the evergreens that surrounded the house, and there would eat and chatter to each other, enjoying their fine repast.

Made With Rice.

Persons who have lived in Mexico have acquired a taste for rice polenta, which calls for a cupful of rice, a tablespoonful each of butter, vinegar and molasses, a teaspoonful of mustard, a teaspoonful of onion juice, salt and pepper. Boil the rice until tender and drain. Then rub it through a sieve and mix with the other ingredients. Cook all together about ten minutes and serve as a vegetable.

For rice pudding without eggs, turn half a pound of well-washed rice into a buttered pan with three cupfuls of cold milk. Sweeten and flavor to taste, grate a little nutmeg over the top and scatter a few bits of butter, and bake for three hours at least in a very slow oven.

For rice chocolate pudding, soak half an ounce of gelatine in a cupful of cold milk, and meantime grate three ounces of chocolate into a pint of scalding hot milk. Turn the chocolate and milk over the gelatine, and when the gelatine is dissolved stir in a cupful of sugar, the white of four eggs and a teaspoonful of vanilla. When the mixture is very cold whip it to a froth, turn it over cold boiled rice and serve very cold.

To make rice cheese cakes bring half a cupful of milk and two tablespoonfuls of butter to a simmer and then stir in a tablespoonful of flour mixed with three tablespoonfuls of boiled rice. When the milk is all taken up add gradually four eggs thoroughly beaten and a cupful of grated cheese. Season highly with salt, pepper and cayenne, take from the fire, make into cakes and fry in hot fat.—New York Sun.

Up To Date.

"Is this the newspaper office?" inquired an irate visitor.
"It is," responded the man at the desk.
"Didn't this paper say I was a liar?"
"It did not."
"Didn't it say I was a scoundrel?"
"It did not."
"Well, some paper said it."
"Possibly it was our contemporary down the street," suggested the editor as he picked up a paper weight, "for this paper never prints stale news."

Musings of The Gentle Cynic.

Sufficient unto the day is the evil of yesterday.

Most of us can act the fool without much rehearsing.

It is quite superfluous for a man to tell a woman he isn't worthy of her. If she thought he was, she wouldn't want him.

The beauty about spending all your money is that nobody can borrow it from you.

Many a man makes a nuisance of himself rather than not attract attention at all.

Many a fellow has gone to the bad because he has overtrained himself to be a good fellow.

Even a new broom will raise blisters.

Once a girl falls in love it becomes a habit with her.

Don't measure success from the standard of your own littleness.

Any politician will tell you that factions speak louder than words.

Some people are almost as changeable as luck.

Every man should endeavor to deserve the good opinion he has of himself.

There is no time like the present for doing the things we don't have to do.

Unfortunately a weak intellect won't keep a man from being headstrong.

Most people labor under the delusion that everybody else needs reforming.

It is a mistake to suppose that women are always talking about their dresses. Sometimes they are talking about their hats.

Don't always trust the chronic hand-shaker. He may have a sandbag up his sleeve.—New York Times.

"He that despieth little things, shall perish by little and little."—Solomon.

"The secret of success in life is for a man to be ready for his opportunity when it comes."—Disraeli.

"Let thy mind still be bent, still plotting, where
And when, and how thy business may be done."—N. Y. Times.

Webster's Plow.

Several large new exhibits were ready for inspection when the New England Industrial and Educational exposition opened for its second week in Mechanics building. Most notable among these was that of the New Hampshire State College and Experiment station, which has a large space in the basement.

Near this display is one of the exhibits which everyone who visits the show should see. It is the plow which Daniel Webster used to guide over his farm at Marshfield. It isn't an ordinary plow by any means, not merely from its historical associations or its antiquity. It is of immense size, measuring thirteen feet in length and weighing 372 pounds. It is of live oak with wrought-iron share. This plow was brought here by the New Hampshire State College, which also exhibited it in Chicago in 1893 at the Columbian exposition, and in Philadelphia at the Centennial exposition in 1876.—Boston Transcript.

In view of the widespread movement for the conservation of natural resources some figures given out by the Commerce Commission of Niagara Falls about power development along the Niagara River, are significant. By the use of only the excess flow of water—without damage to the appearance of the Falls—power equivalent to that produced by 6,700,000 tons of coal is turned out every year on the Niagara River. As 6,700,000 tons of coal, at the price prevailing here, would cost about \$12,952,000, the utilization by the water for power represents an annual saving of that amount of money.

A Marcellus man found hides worth \$500 that have been buried seventy years. In digging a cellar the hides were uncovered in the vats, where they had been left when the tannery was abandoned years ago.—Dryden Herald.

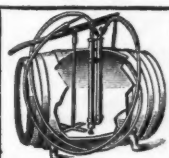
A ear of live fish was shipped from Watkins to New York, the first consignment of the kind ever sent from the head of Seneca Lake. The fish were carp, ranging in length from one foot to three, the whole shipment weighing about four tons.—Watkins Chronicle.

Mandy Lee

The Incubator of Certainty

Operated by rule. The novice gets the same excellent results as the experienced operator. The only incubator with the open-front poultry house plan of ventilation. Only one applying the vital principle of low moisture with high temperature and high moisture when heat runs low. All regulated automatically. Send for latest book, describing the new features—plain, practical, helpful.

GEO. H. LEE COMPANY,
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DEFEND YOUR TREES

from Scale and fungus disease with a Defender Sprayer. Powerful two-line apparatus. Made of Brass, perfect construction, easy working, 15 outfits to select from. Satisfaction guaranteed. Descriptive circular and prices, Free.

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With the Dorach Double Row Ice Plow. We guarantee it will cut more than 20 men sawing by hand. Cakes are cut uniform, of any size and thickness. One man and a horse will cut more ice in a day than the ordinary farmer or dairyman can use. You can cut for others and make the price of our plow in two days' use. Ask for catalogue and introductory prices. JOHN DORSCH & SONS, 260 Wells St., Milwaukee, Wis.

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THE SILENT CALL

The agent or peddler who calls at your house is not silent.

He disturbs you with his talk. Green employs no agents or peddlers to sell his trees. Green's catalog makes a silent call at your house. This catalog will lie on the table until you are ready to open it and read its contents. If you desire to buy anything mentioned in the catalog you are at liberty to do so, but you are not talked to death meanwhile. Green's catalog, with lithographed covers is an ornament to any farmer's stable and can be read with pleasure, profit and interest. If it leads to your planting an orchard, or a fruit garden for supplying your home with fresh fruit, our catalog may be the most profitable book you have in the house next to the Bible. Green's catalog sent free when called for. Capital \$300,000. Address, GREEN'S NURSERY CO., Rochester, N. Y.

ELECTRIC GOODS FOR EVERYBODY Lamps, House Lighting Plants, Telephones, Xmas Tree and Flash Lights, Toys, Railways, Engines, Motors, Belts, Bells, Batteries, Books. Fortune for agents. Big catalogue 3 cents. OHIO ELECTRIC WORKS, CLEVELAND, OHIO.

Fruit Trees That Thrive and Bear

Thrifty, vigorous trees; trees with lots of good roots and firm, mature wood—these are the kind of trees that we grow. They begin bearing early and they continue to bear abundantly for years.

At our nurseries the soil and climate are just right to produce trees that are hardy and reliable. Our success and experience of 25 years is your guarantee that everything in our stock has been carefully selected and thoroughly tested. All kinds of fruit trees—apple, peach, pear, cherry, etc.

Write for our latest Catalog. It's free!

Barnes Bros. Nursery Co.,
Box 9 Yalesville, Conn.

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Please mention Green's Fruit Grower.



THE OLDEST FRUIT JOURNAL IN AMERICA

CHARLES A. GREEN, Editor

The Highest Authority on Fruit Growing

Thousands of Prosperous Fruit Growers have obtained success while following Mr. Green's advice. You can do it too.

Read Green's Fruit Grower and learn how. It tells the whole story month by month.

Send One Dollar and get Green's Fruit Grower for thirty-six months. Send to-day and we will send you Mr. Green's famous book "How I Made The Old Farm Pay."

GREEN'S FRUIT GROWER
91 Wall St., Rochester, N. Y.

Guarantee Your Fruit Crop by Spraying



It is practically impossible to raise perfect fruit without spraying thoroughly. To spray properly you need the best spray pump made—one of the many

GOULDS Reliable SPRAYERS

Every part is made to give long service and designed to give the best possible results in all spray work. Every requirement is met by the complete line shown in our book,



"How to Spray, When to Spray, Which Sprayer to Use"

Send for a Copy. It contains valuable spray formulas.

THE GOULDS MFG. CO.
43 W. Fall Street
Seneca Falls, N. Y.

Largest Manufacturer of Pumps for Every Service

When you write advertisers Please mention Green's Fruit Grower.

MONEY SAVED ON FRUIT PLANTS

That grow, trees, vines and Ornamental. None grown that excels ours. Handsome Catalogue free. Grand Mere Nursery, Baroda, Mich.

Monarch Hydraulic Cider Press

Great strength and capacity; all sizes; also gasoline engines, steam engines, sawmills, threshers. Catalogue free.

Monarch Machinery Co., 605 Hudson Terminal, New York

Cider Machinery

Turn your surplus fruit into money. You can make handsome profits from the sale of cider, vinegar or fruit juices. Write for catalogue of outfit.

THE ROBERTS & ROBERTS PRESS CO. 347 Water St., Syracuse, N. Y.

SKUNKS AND ALL OTHER FURS

We want them. If you have never written to us for a price list, do so at once, and be kept posted throughout the season. We want furs from the Eastern States and Canada only.

Charles A. Kaune, Montgomery, N. Y.

Send for our Spray Pump Catalog. Green's Nursery Co., Rochester, N. Y.

FRUIT TREES

We have the nicest lot of guaranteed fruit trees you ever saw—apples, plums, cherries, pears, peaches. All grown in the north, hardy, healthy, absolutely free from scale. And they're all going to be sold at bargain prices.

We Do Not Sell Through Agents

No need of your paying agents' commissions and expenses. Buy direct from the nursery. We save you about half the price agents charge.

Get Our Nursery Book

Tells how to plant trees, shrubs, vines, etc. Tells how to care for them, when and how to spray. Gives a fund of information and quotes prices that are bound to interest you. We prepay the freight on orders of \$5 or more.

ALLEN L. WOOD, Woodlawn Nurseries
575 Culver Road, Rochester, N. Y.

When you write advertisers Please mention Green's Fruit Grower.

The Home Orchard.

Will it pay? Cannot one buy fruit cheaper than to grow it? Neither question is worthy of serious consideration even though they could be answered in the affirmative. Building a home is worthy our best thought and labor, for it is within the confines of our homes that we receive our noblest suggestions, there those we love best are influenced by the environment provided, and who doubts the worth of uplifting environment? If adequate provision in beautiful trees, both fruit and ornamental, roses, blooming shrubs and vines tend to beauty and comfort, rest assured it pays. The natural desire in the life of every child is a love of flowers, worthy of stimulating, a desire to grow and pluck as their very own fruit and flowers. It is the love of the beautiful and should be encouraged. Says Farm and Ranch. There are many lives starved because of the thought "it won't pay." When we reason that no effort is too costly if spent in making home, for those we love, as attractive and comfortable as our means will permit, less thought will be given the old theory that "it won't pay." But aside from the esthetic and in addition thereto, let us consider the more practical side of the question.

The average homebuilder is an intensely practical citizen and before spending his hard-earned money would like to be shown that he will get certain returns. Perhaps 75 per cent. of all fruit-bearing trees planted over the Southwest are peach trees, the soil and climate being especially adapted to the growth of this particular fruit. In variety, color, time of ripening, etc., the assortment is varied indeed, all good, but naturally some more profitable than others. There is little excuse for any home being without an abundance of this luscious fruit, for, beginning the last of May or first of June and continuing almost without a break into September, we have a large list of varieties. Peach trees can be had from any one of the many reputable nurseries at a price that is so low it will surprise one, and we again say there is no excuse why every home in the great Southwest should not have an abundance of this splendid fruit. These trees properly cared for come into bearing at a remarkably early age after setting, often the second year where first class trees are planted, and returns in a crop of fruit are as regular, or more so than on any agricultural crop.

While peaches will probably continue a leader, the home orchard need not be and should not be planted exclusively to peach trees. Plum, pear, apple, apricot, pecan, Japan persimmon, grape, blackberry and dewberry all thrive on most soils over the Southwest and should be planted in varieties suited to each particular locality. The best way to determine the variety to plant is by consulting a nurseryman who is in position to give dependable advice and who is directly interested in the success of every tree planted. One's success, to a very marked degree, is influenced (1) by planting varieties adapted to each particular locality; (2) by selection of vigorous, healthy trees rather than cheap and inferior stock; (3) and by planting and care thereafter. Nurserymen generally issue bulletins on care of trees and plants, many of them giving brief instructions in catalog and on shipping tags. Any one interested will receive free valuable suggestions on care of the orchard by simply making their wants known to any one of our many reliable nursery firms.

Treatment of Run Down Orchards.

There are a large number of old orchards in a fairly thrifty condition which have been neglected and are producing an inferior grade of fruit which with the proper treatment could be made to produce fruit of the first quality. Says Western Farmer. To produce this kind of fruit we must study the principles which underlie its production. The first move which claims our attention is to stimulate the growth and producing tendencies of the tree.

Usually the orchard has stood in sod for years and has been pastured, or crops of hay and grain have been cut and removed, thus robbing the soil of its fertility and humus. It has thus become hard and packed, in which condition it will not hold moisture and prevents the trees from taking up the plant food that is in the soil.

For this condition there are two lines of treatment: either the sod should be broken up with the plow, not too deep, and thoroughly cultivated, thus forming a mulch and liberating plant food, or it should be given a heavy covering of stable manure, or even straw if the manure is not available. I would much prefer the latter system, should it be necessary to cut off a large number of the lower limbs in order to do the plowing and cultivating.

It would also be advisable to take a hoe, in which cut a semicircle that will

fit the branches, and scrape off the old rough bark and moss as high as it can be reached handily from the trunk down to the ground. This can be done at any time during the winter months when the weather is suitable to be out, and work is not pressing.

The next important move is the pruning, which should be done judiciously and not blindly, and for this work a good sharp pruning saw and shears are needed—not the axe. Remove all dead or dying branches and twigs, also water sprouts and cross limbs. Thin out branches here and there, in such a manner as will give the tree an appearance of openness, which will let in a reasonable amount of sunlight and air. An occasional water sprout can be left to advantage if it is located in a position to take the place of a dead branch and help to form a new top for that part of the tree.

When pruning, the cut should at all times be made as close to the main branch as possible, and the wound, if at all large, should be covered with paint, or better yet, with grafting wax made thin enough to spread with a brush, as the protection thus afforded will prolong the life of the tree many years.

The last and all-important step in this system of building up the old run-down orchard is the spraying, which must be thoroughly and properly done, otherwise we would only be stimulating the productive tendencies of the trees to growing larger and prospectively finer fruit to be infested with worms and marred with scab fungus, making the fruit practically worthless.

In spraying operations a first-class spraying outfit is necessary on a large or small scale, as the size of the orchard would seem to demand, and the trees should be sprayed very thoroughly with Bordeaux mixture and the arsenites at least four times during the season, giving the first application just before the blossoms open and two applications within a period of 10 days after the blossoms have fallen, and the fourth application during the first half of August.

Commercial Orchards.

All orchards should be cultivated as commercial orchards. The day of the cider apple is past. The old, neglected orchard with its dead trees and wormy apples is a blot on the face of the earth. Trim, spray, cultivate and get big returns. Keep the orchard land in good tilth. The trees can be set as soon as the leaves fall.

Plant a cover crop in the orchard. Rye, barley, wheat and oats are good non-leguminous plants, but the legumes are better.

Crimson clover makes a valuable cover crop for the orchard. Prune off all dead or weak branches. Thin out the tops to let the sun in.

Burn the diseased branches so that the other trees will not be contaminated. It will also be advisable to open the heads of peach trees, remove surplus branches and take off water sprouts.

The soil for orchard purposes must be well prepared and better results may be expected if this is done some time before the trees are to be transplanted. Break the land deep, harrow it well and plant a cover crop of rye, crimson clover, vetch, oats, wheat or barley. The trees may be set as soon as the foliage drops.

Gather up dead branches and burn them, as they are apt to harbor bark beetles, one of the worst of orchard pests.

Former Judge of the Supreme Court of the State of New York, Roger A. Pryor, who is still an active lawyer in his eighty-fourth year and who recently said that no man need be useless in his old age if he has spent his youth wisely. "Time is an abstraction," said the venerable jurist. "Its mere passing has no effect on man or other material things. Whether a man is or is not in full possession of his mental faculties in his old age depends entirely on how he has used or abused the time that has been given him." Judge Pryor's remarks were in answer to the announcement of President George Harris, of Amherst College, who gave up his position because he was sixty-eight years old and declared that in the latter part of the seventh decade a man "cannot render his most efficient service."

Luther Burbank has produced a thornless blackberry bush. Now if the California wizard will only produce a graftless political plum tree he will be sure of a niche in the Hall of Fame.—Rochester Post Express.

A niche only? He would be entitled to an entire section.—Batavia News.

The Dunkards, a religious organization in some respects resembling the Quakers, it is reported, will establish a settlement in Tompkins county, probably in the town of Lansing. One report says that 500 people will come to this county.—Dryden Herald.

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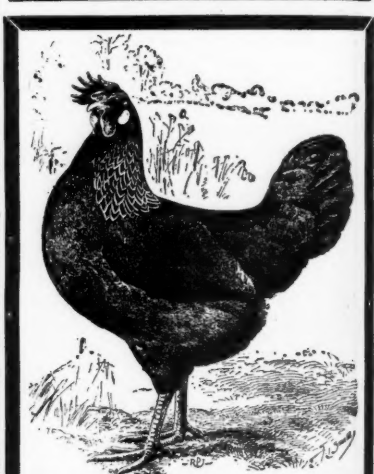
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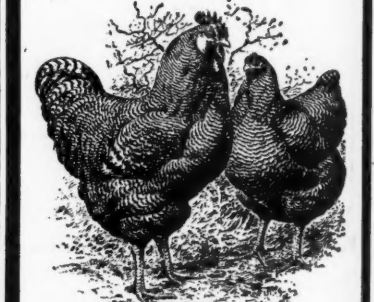
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Improved Methods of Orcharding.

By B. J. Case, President of New York State Fruit Growers' Association.

I have given you my ideas in regard to the large number of fruit growers scattered over this state who are trying to grow fruit as our fathers did forty years ago; whose failures, due to the increased prevalence of insect pests, fungous diseases and mismanagement of soil, are becoming more apparent every year; but there is a brighter side to horticulture. Says B. J. Case in W. N. Y. State Dept. of Agriculture Report. We have several sections where fruits of the different kinds are a specialty; where the owners of these fruit plantations are specialists in their line. Some of them are getting results from their farms that will equal the stories told by the real estate boomers of Hood River Valley. There are instances where some of these fruits have yielded a net income, year after year, of ten per cent. on a valuation of one thousand dollars per acre. The people that are acquainted with the fruit section in western New York know that these figures are true. Our experiment station on the farm at Greece, I think it is called the "Outer Farm," where they demonstrate the value of cultivation as compared with sod culture, has carried on an orchard of ten acres for five years, keeping accurate account of expenses and everything relating to it. Professor Hedrick, about a year ago, came out with a paper to prove that an apple orchard was better—gave better results—with cultivation, and in this paper he said that the cultivated portion of that orchard had paid the station ten per cent. per year for four years on a valuation of one thousand dollars per acre. That does not look as though horticulture was going back, when people have learned to do these things and to do them right. We have a good many such instances as this in the western part of the state. I know of an orchard of twenty-five acres of apples that has paid a bigger percentage than that on an average of one thousand dollars per acre for the same length of time.

A careful investigation of these widely different results reveals the fact that the successful grower is a practical business man; that he has taken advantage of the information dug out and disseminated by experiment stations and the colleges of agriculture, and that he always attends every farmers' institute and every horticultural society within reach. Our College of Agriculture at Ithaca is doing splendid work, and I believe the money the state is appropriating to these colleges and experiment stations is money well invested, and will yield a much better income to the people of the state than will the money put in the one hundred and one million dollar ditch. If we can have agriculture taught in our rural schools so that the trend of instruction will show our brightest boys and girls the advantages of advanced horticulture over congested city life, we have laid the foundation for their future.

But I believe that if we ever reach the ordinary fruit grower, our most available way is through the Commissioner of Agriculture and the farmers' institute, in addition to the methods already mentioned. He must have more money, more efficient institute workers, so that he can hold not less than a two-days meeting in every hamlet throughout the state, every year. It is not necessary that these institute workers shall all be orators, but each must have a story to tell that will appeal to the practical common sense of the hard-headed farmer, so told that he may convince the man on the farm who is interested in his children's welfare, that modern fruit-growing is a far easier, happier and more healthful life for the person of average ability than anything the city can offer.

Care of a Young Orchard.

A reader in Missouri who has a one-year-old apple orchard asks if he has given the right treatment. Having a heavy soil he mixed sand and gravel with it before planting the trees. Then he put on sawdust for a mulching, and in the fall tied on corn stalks for rabbit protection. We think you are on the way to success with your orchard because you seem willing to labor, and give attention to details. The sand and gravel, if properly mixed with the soil, must be beneficial in making it porous, and the sawdust ought to be a help when a dry time comes. But we should hesitate to use it heavily unless it is well rotted. It is inferior as a mulch to straw or hay. We approve of the use of corn stalks for a shield, it is one of the home devices.

Power of Growing Trees.

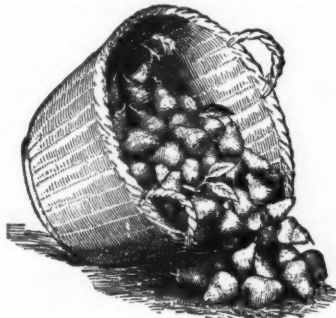
Those who wish to see the enormous power of a growing tree can do so by going to the north side of Albert Street. Two trees that were enclosed by the cement sidewalk when it was built many years ago have split the slabs like frag-

ments by huge cracks extending in several directions. Says Ottawa Citizen.

The breaking tensile strength of neat cement as used for the city is 500 pounds per square inch. With the mixture as used in the sidewalks an expert estimated it would be about 160 pounds per square inch. There are several of these cracks, so the pressure must have been still more than for one fracture. The trees are a chestnut and a soft maple. A point worthy of note in this connection is that when healthy trees are enclosed by concrete walks space should be left for expansion at least equal to the average size of the full growth of the tree.

The Bartlett Pear.

One of the best known and most satisfactory pears for general use is the Bartlett. It has been cultivated in the United States for nearly or quite a century. The vigor of the tree, together with its early bearing and good bearing, and the fine size and quality of the fruit all tend to give it the high standing it



has long maintained. Its season is August and the early portion of September; but in the far North it is strictly an autumn pear. Says Stockman and Farmer.

The tree is vigorous, as stated above, rather upright in growth, of symmetrical form and well suited to positions in which ornament comes into consideration. It is somewhat liable to blight but much less so than Clapp's Favorite, Flemish Beauty and a number of others. Pear blight is only serious when allowed to have its way. But by cutting off the affected branch as soon as observed (known by its black color), cutting three or four inches below the diseased portion in order to be sure of getting it all away and then burning what has been pruned off, there will be little trouble. A young tree (of a different variety), near this writing, blighted badly six or seven years ago and had to be cut back severely; but it has grown well since, showing no sign whatever of blight, and has been bearing for three or four years.

The flesh of Bartlett is white, very fine-grained, very sweet and juicy, with a slightly musky perfume. The latter is not agreeable to some persons; but in canning, for which the fruit is excellent, retaining its form well in the cans, the slight perfume is not observed. Like pears generally, it should not be fully ripened on the tree, but picked when the seed begins to color and ripened in the house. And strangely enough, the fruit of Bartlett, when not full grown, ripens and becomes of good quality, if kept in the house a week or more.

Effect of Soil and Fertilizers on Fruit.

Editor Green's Fruit Grower.—Does the soil affect the quality of varieties of apples?

Here is our experience: We planted two peach trees in the garden soil and two in the same soil, only there had been leaches from soap making thrown at one side three or four years before the two trees had been planted; all four were seedlings; in four years all were full of peaches. The ones planted in the common garden soil were small, just ordinary seedling, free-stones of light color and sweet. The two trees in the ashy soil not over ten feet apart were ten days earlier, of the same color, but oh such delicious, juicy sweet; would melt in your mouth and fully three times as large as the others. We know the seeds were all from the same tree.—H. Martin.

Reply: There is no doubt that soil does affect the quality of fruit of all kinds, also that different kinds of fertilizers affect the quality, firmness and long-keeping characteristics of fruit. We doubt, however, in your case, whether the marked difference in the size and quality of the fruit was caused entirely by the soil and fertilizers. Since the trees were from seedlings, it seems reasonable to suppose that there was a difference in the varieties of the peach trees that bore different kinds of fruit.—Editor Green's Fruit Grower.

A calf wandered into the fire station at Port Fairy, and becoming entangled in the bell rope, set the bell ringing wildly. Of course all the firemen made a dash for the station.—Geneseo Republican.

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BASHFUL JOHNNIE And What Happened Thirty Years After.

Written for Green's Fruit Grower.

Jennie was the belle of the village. Not only was she a beauty with dark hair, hazel eyes and red cheeks; she was a charming singer and witty. She was a little mite of a thing. Her lovers when contemplating her charms thought of the old saying that nature's best products are put up in small packages. She had many admirers among the young men, not only in her own locality but neighboring towns and cities. Here is a note that she received one day:

"Dear Jennie:—I will call upon you tomorrow evening. I am about to leave for Australia to be gone many years and possibly forever." John Albro.

Jennie loved Johnnie out he was a bashful boy and it seemed to be the joy of her life to tease him.

Night came on the fateful day and with it bashful Johnnie. Jennie was not in, but it was announced that she would soon return from a drive. It appears that one of her admirers had been out driving with her on the surrounding hills, in the glare of the autumn sun, and they had not yet returned. Johnnie felt that each moment he was waiting was an hour, and wondered why the young people should prolong their drive to such length. Finally a nicely equipped horse and carriage drove up to the door. Johnnie saw the young man alight, pick up Jennie and carry her in his arms to the porch. This act filled him with dismay and sorrow, for it seemed to him that no girl would allow a young man to do such a thing as this unless they were engaged to be married. Jennie's escort left her at the door and Jennie entered the room where Johnnie was waiting. Johnnie could not suppress the feelings inspired in his breast by the scene he had witnessed from the window, therefore his manner was more than ordinarily constrained and awkward.

"I thought," said Johnnie, "that perhaps you would have some word for me before I leave on the long journey tomorrow morning."

"No, I have nothing particular to say except to wish you a pleasant journey," replied Jennie.

"Is there not some other word you would like to say before bidding me good by for many years and possibly forever?"

"I don't think of anything," replied Jennie, who was something of a coquette.

"Think of the long years during which we shall be parted," said Johnnie. "Think of the many pleasant hours we have passed together, riding horseback through the valleys and over the hills, in the sunlight and the moonlight in rowing up and down the river and at picnics and church sociables. I thought you would say something to me that would cling to my memory and brighten the years of our separation."

"I don't think of anything that I want to say," she replied, "except to wish that you may have a safe journey to your destination and a safe return."

"I was surprised to see you carried in the arms of Jack Loudon a moment ago," said Johnnie.

"I don't see anything remarkable about that," replied Jennie. "In fact how I could not have helped it if I had wished to do so."

"Perhaps you like Jack better than you do me," said Johnnie.

"Perhaps so," replied Jennie.

"Well, I must be going. I have my trunks to pack yet and several friends to bid good by, so I will say good by to you, Jennie."

"Good by, Johnnie," said Jennie, holding out her little hand coldly and mechanically.

"Then you have nothing to say to me that will brighten the years of my absence in a foreign land?"

"I cannot think of anything now," replied Jennie, and thus the two parted. But as Johnnie opened the latch of the gate and disappeared in the darkness Jennie sat in the window wishing that she had courage to call him back and to clasp him in her arms as she would like to have done. Then the quick tears came to her eyes as she fully realized the sadness of parting.

THIRTY YEARS AFTER.

Thirty years after the scene mentioned a grey haired man entered his native village to pass the day in reviewing the scenes of his boyhood. It was John Albro, developed into a man of affairs, a man of wealth, of great attainments, one whose name had been heralded over the world. Sad were his thoughts as he approached his native village, and saw it nestling in all its beauty in the valley, surrounded with beautiful and fertile fields covered with orchards and clumps of forest trees. How well he remembered his boyhood companions, the boys with whom he used to play, and who sat near him at his bench in the district school, and the bright faces of the girls, his former schoolmates, and particularly one whom

he had never for a moment forgotten. He saw many changes in his native village. A great factory had been established and a railroad had been built through the village. Many new buildings had been erected. While these interested him, he was thinking more of his old associates. He made inquiries, learning that nearly all of them had passed from earth and were buried in the cemetery on the borders of the village where the whispering pines sang a continuous requiem.

There was one little cottage in the village that was of greater interest to him than any other object. It was the former home of Jennie. Slowly he wended his way to the cottage and seated himself in the same old seat where he had sat thirty years before, beneath the shade of a big tree. He had not been seated there long when an aged woman came to the door and walked out upon the porch. Her hair was almost white, but her face still possessed charm and beauty. The aged man rose, inquiring "Can you tell me where I may find Jennie Davis?"

"I am Jennie Davis," she replied. "Can it be that you have forgotten me, Johnnie?"

But it is not surprising that Johnnie should not at first recognize his former sweetheart, for thirty years bring many changes, more to a woman than to a man.

"And so you are the Jennie I used to know?" exclaimed Johnnie. "And where is your husband?"

"I have no husband," replied Jennie. "But the man who lives here does not bear your name?"

"No," replied Jennie. "He is my nephew. I am keeping house for him." "I remember," said Johnnie, "that when I left you thirty years ago I gave you a rose."

"Yes," said Jennie, "And here it is," and she drew forth a packet which she kept near her heart.

"Just like a woman," said Johnnie. "And I remember too that you gave me a flower at that time and I think it was a rose."

"No, it was not a rose. It was heliotrope."

"I am quite sure it was a rose," said Johnnie.

"No, I am sure it was a heliotrope I gave you thirty years ago."

"I wonder what I could have done with that flower," said Johnnie.

"You have probably forgotten all about it," replied Jennie. "Just like a man."

"Yes, just like a man," said Johnnie, and then he put his hand in his pocket and drew out a little packet. He opened it and held it out in his hand toward Jennie.

It was the heliotrope, the flower that he had preserved through all those years. Then he clasped his old sweetheart firmly to his breast, and they were not parted again until death came to claim them.

"What have you been doing these years?" asked John.

"During twenty years I was a missionary in China. The other years I have just spent in waiting," replied Jennie. "Waiting for what?" asked John. "Waiting for you to come home." "Just like a woman," said John.

Who is Thinking.—"Someone has said 'thinking' is just what nobody wishes to do. These words hold the explanation of the insufficiency and mediocrity of human existence, for truly no one wishes to reflect. How many even intelligent men and women live without ever performing this function."—Dora Melegari. "I am entirely convinced," said Arnold Bennett, "that what is more than anything else lacking in the life of the average, well intentioned man of to-day is the reflective mood. We do not reflect. I mean we do not reflect upon genuinely important things; upon the direction in which we are going; upon what life is giving to us; upon the share which reason has in determining our actions; and upon the relation between our principle and our conduct."

Joseph Pulitzer.—Not only the American people, but struggling and oppressed human beings throughout the world, lost a powerful champion when Joseph Pulitzer died. The greatest of journalists of his or any time! May the newspaper which lives as the monument of his genius ever be faithful to his ideals.—Harper's Weekly.

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It is authoritative and reliable—the adviser and friend of one hundred thousand fruit growers. It tells how to make big profits in fruit growing—how to locate orchards, fruit, soil. It tells when and how to pick, harvest and market the fruit. You get the latest information on all fruit growing topics.

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GREEN'S FRUIT GROWER. ROCHESTER, N. Y.

Plum and Berry Growing.

Editor Green's Fruit Grower: More than twenty years ago, when I began furnishing plums for our home market there were many people here who had never seen a good plum. (California fruits had not then found their way into our Eastern markets.) And since that time I have never been able to supply the demand for my plums, notwithstanding the fact that many others are growing them. I now have many young trees just coming into bearing, and have this season planted out 300 more. I hope in the near future to be able to meet all demands for this, to me, most desirable of the smaller fruits.

We should strive to produce a larger quantity of No. 1 fruit, and a much smaller quantity of inferior fruit. This will, in a great measure, solve the problem of overproduction. The better the fruit the greater will be the amount consumed. Good fruits fresh from the tree, or vine, will increase our appetites in about the same ratio that poor, half-ripened fruit will decrease it.

My own experience in marketing strawberries will show that people do appreciate good fruit, and are willing to pay for it. For the past three years I have sold all my berries (both strawberries and raspberries) to our leading marketman, for the reason that he was willing to take all at a price which I considered better than to peddle them myself.

I use only my new baskets, standard size. (They hold a quart, even full.) And Keinett's patent display crate, that shows all the berries at once. I assort all berries after they come from the fields, and pack carefully in the baskets, making two grades. The baskets are filled round full and the top layer is turned hulls down, being very careful the berries in the top layer are no better than those in the rest of the box. I employ pickers forenoon, so that every basket reaches the customer the same day it is picked, the first load going to market about 11 A. M. and the balance by 6 P. M. It is always understood with my marketmen that should any customer complain of any box of my berries he is to give him another box and charge the same back to me.

Many of these teams had driven past other fruit farms and come five or six miles to get these berries, that were really no better berries, except that they were fresh picked, clean and honestly assorted and packed and the baskets were full, and these people knew it.

There is no money in growing poor fruit, and there is certainly none in marketing good fruit in a slipshod manner. The finest California fruits would not bring enough in our Eastern market, if it was put up in the ordinary manner of putting up fruits, to pay the transportation charges.

A good home market is by far the best market. We can not all secure a home market, but when Eastern fruit growers have learned to assort their fruits as closely as the California fruit is assorted, then will he find a better market for his product, and secure better prices therefor. People will buy ripe fruit, fresh picked from the trees or vines, as long as it can be obtained, but when this is not to be had they will buy the best they can get, even to the beautiful California fruit that was picked green, and has about as much real fruit taste as a good clean poplar chip.

Personally we have no use for this kind. We prefer home grown and home canned fruits to any California fruit we have ever seen in our Eastern market.

Orchard management is one of the learned professions out here in the Northwest. We venture to say there is a large per cent. of college trained men in this work as in any other one profession in the three Northwest states, says Northwest Farmer and Orchard.

Blight of Orchard Trees.

What tuberculosis or yellow fever is among human beings, what hog cholera or glanders is among animals, that the so-called "fire-blight," "apple-blight" or "pear-blight" is among the trees of the orchard, says K. A. Kilpatrick.

Originating in a bacillus invisible to the naked eye; so contagious that it may be borne to the orchard by insects from an infested plant half a mile away or on the bright steel of a pruning knife which seems as clean as it is bright, this destroyer adds mystery to the deadly effectiveness of its attacks; and the discouraged fruit grower is made to feel that he is dealing with a foe whose operations border on the domain of the supernatural.

But the organism which produces blight has been recognized, its habits defined, and some means have been found, more or less effective, of staying its ravages. Its name is *Bacillus amylovorus*. Its guilt is proved by the fact that it is found in large numbers in freshly blighted twigs. From such twigs the bacteria have been taken and grown in laboratory cultures. Suitable healthy wood, inoculated with

these cultures, quickly manifested disease, exhibiting the bacteria in abundance.

Moisture favors their growth; dryness is fatal to them. They therefore thrive in moist, warm weather; but freezing does not harm them. They are as active as ever after being kept frozen for long periods. Their main points of attack are the inner bark and growing layer of the tree's trunk and limbs, the dead blossoms, leaves and branches seem on infected trees are the result of life-giving sap. The disease travels downward from the point of infection, at the rate of from two or three inches to a foot a day—the faster and further in succulent, sappy shoots.

The upward mounting of the sap from the roots, in the warm days of spring, furnishes the starchy, sugary substances for which the bacteria, having found lodgment on the tree, have been waiting. Now they grow and multiply rapidly.

Cider.—The usual preservative employed by cider makers is salicylic acid, about three to four ounces to the cask, thoroughly dissolved and mixed, says Country Gentleman. We can't say that we approve of the use of such antiseptics, as whatever will stop fermentation in the cider will, if taken in sufficient quantities, stop digestion (which is a kind of fermentation) in the stomach. Probably, if one drinks only a little, the effect is not markedly deleterious. The later in the fall the cider is made, the better it will keep. For our own use we should be inclined to prefer the following method, employed successfully by one of our correspondents, though in this case the cider contains alcohol: "Let the cider ferment until sufficiently acid to suit the taste; then bottle in champagne bottles of one quart each, putting one rasin and one clove in each bottle; cork tight, wire securely, keep in cool cellar, and in three months it will be fit for use. Care must be exercised when opening to let the gas escape gradually, or your bottle will be emptied all over the room. It makes a drink superior to champagne, and does not make the hair pull after using. More than one rasin put in will burst any bottle made."

Care of Winter Apples.

"In choosing apples for storage select sound fruit free from worms and particularly free from bruises. If care has been exercised and rigid sorting practiced there is little danger of rotting," states Prof. J. G. Moore of the College of Agriculture of the University of Wisconsin. The best plan is to pick into a large basket, using care to prevent damage to the fruit through falls or bruises. The fruit keeps best if fully matured and well colored, although it should not be allowed to become too ripe as the ripening process continues under storage conditions.

Hold the fruit in storage at a low temperature and it ripens less rapidly than if remaining on the trees. A very detrimental practice is that of piling the apples under the trees and allowing them to remain there several days.

An Accommodating Cannibal.

"I am going to win your heart, brother," said the missionary to the Cannibal King. "All right, doctor," replied the King. "That suits me. They say the way to a man's heart is through his stomach. Would you prefer to be roasted or broiled?"—Harper's Weekly.

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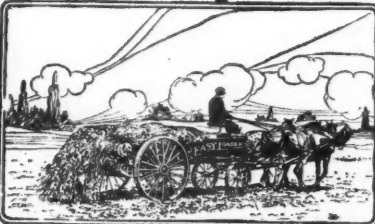
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"Good manure and a good spreader will positively increase your crops."

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Every farmer realizes to a degree the value of his barn yard manure, but frequently one overlooks how he can greatly increase its value. Thorough spreading means increased yields—greater profits.



The "Easy Loader" is the perfection of Spreader construction. With its side sills of channel steel and cross sills of heavy oak, and every bolt, rod and plank of corresponding strength and quality, the "Easy Loader" easily ranks first among spreaders. Its ability to empty clean attracts wide attention among users of ordinary makes. No complicated parts to freeze or get out of order—just "Johnston Quality" throughout.

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Included: Grain Binners, Reapers, Rakes, Spring and Spike Tooth Harrows, Side-Delivery Rakes, Mowers, Tedders, Hay Loaders, Corn Binders, Disc and Orchard Harrows and Rollers.

This name—JOHNSTON—has stood for QUALITY throughout the entire development of modern implements. It carries with it a guarantee of strength, endurance, capacity, simplicity, service—all summed up in the one word—Efficiency.

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Don't Overlook the Importance of the Insecticide You Use

If your selection is right, your spraying will get results—it will pay. Start right. Select a brand you can depend upon—one that quickly kills chewing insects, such as the curculio, moths, beetles, etc., worms, canker-worms, potato bugs, etc.

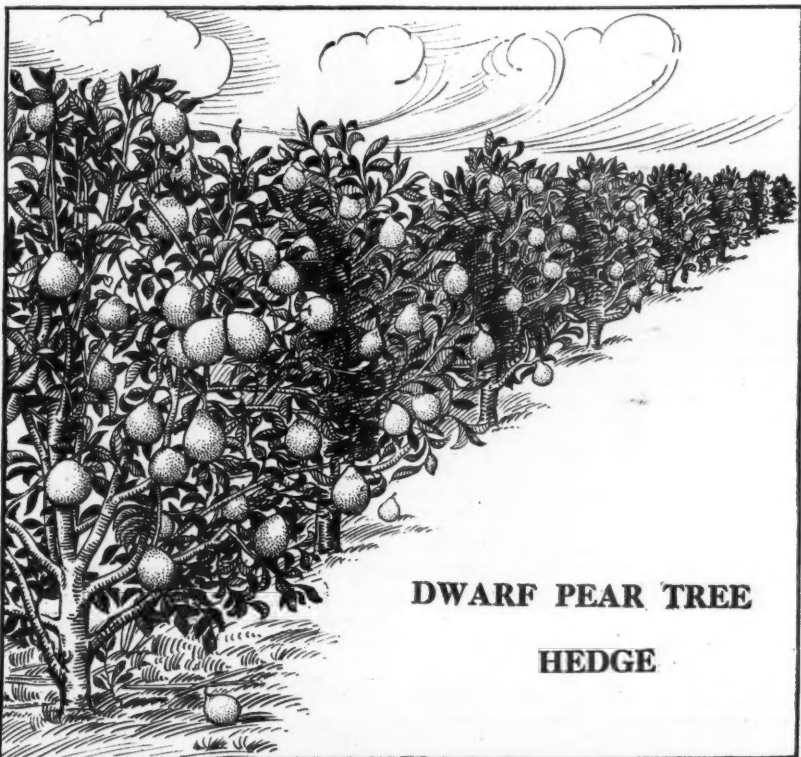


ARSENATE OF LEAD

HIGH QUALITY. LOW COST.

Is so convenient, so effective, that once you use it, you will continue. Always uniform; mixes easily; remains in suspension a long time; acts quickly; sticks like paint to plants, does not injure foliage or fruit. Paste form in any amount from one pound can to 600 pound barrel; Powder Form from one pound can to 100 pound keg. Always shipped in Hard Wood or Steel Containers. Absolutely superior to any other Arsenate of Lead and costs less. Accept no substitute. Write us for circulars and prices. Agents and wholesale distributors wanted.

INTERSTATE CHEMICAL CO., 19 Bayview Ave., Jersey City, N. J.



DWARF PEAR TREE

HEDGE

Dwarf Pear Hedge.

C. A. Green says plant a row of dwarf pear trees through your garden, the trees to be only three feet apart. This he calls a dwarf pear hedge, though it is not strictly a hedge. Mr. Green planted a row of dwarf pears through his garden 3 feet apart which has borne beautiful fruit bountifully for the last twelve years and is still thrifty and productive. He planted the following varieties: 6 Duchess, 4 Seckel, 4 Bartlett, 3 Anjou, 3 Flemish, 3 Wilder Early. There are enough trees in this row 69 feet long to supply a family with pears from August to January and the cost of the trees is but a trifle. We make a special low offer for the trees for this dwarf pear hedge. Notice that dwarf pear trees if well cared for produce larger, finer and more handsome fruit than standard pear trees. We offer for sale 33,033 dwarf pear trees in large and medium sizes. Please write for particulars.

GREEN'S NURSERY CO.
ROCHESTER, N. Y.



Fruit is Now A Necessity, Grow It!

The cost of living goes higher, health necessities get scarcer, the daily struggle keener. The man in touch with the soil is the only man whose feet are not "on shifting sands."

Do the Thing That Pays—Grow Himalaya Berries

A new fruit from Central Asia. The plant is a briary vine that does not die down or winter-kill an inch. Makes 20 to 30 feet of wood a season. Fruit is borne on both old and new wood. The plants bear at 18 months of age. Berries resemble blackberries but are larger and meatier. Ten tons from an acre of 18 months old plants is an average crop—worth at least \$1,000.

We know that Giant Himalaya is the coming fruit. You should find it out. We tell why in the *Berrydale Berry Book*. Where shall we send your copy?

BERRYDALE EXPERIMENT GARDENS
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READY TO SPRAY

Our No. 190 Horizontal Barrel Sprayer, solidly built on skids, is shipped ready for work in orchard, garden or field. Pump outside—all parts easy to get at. No waste of time; no unpleasant work with the hands in the solution, trying to fix valves on packing. No corrosion. Heavy pressure. Thoroughly serviceable and satisfactory. Four row attachment.

You must see this sprayer to know its value. Ask your dealer to show it. Write us for special booklets. Complete line of farm, garden and orchard tools backed by 76 years' experience.

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We will send you 12 of the prettiest post cards you ever saw if you will cut this advertisement out and send it to us with 4c. to pay postage and mailing and say that you will show them to 6 of your friends. D-16—New Ideas Card Co., 233 S. 5th St., Phila., Pa.



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Send your name and address for 12 pieces of our jewelry to sell at 10c each. Return \$1.20 when sold; we will positively send these 4 beautiful rings free. Dale Watch Co., Dept. 745 Chicago

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CARBONDALE INSTRUMENT CO., Carbondale, Pa.

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Crates and baskets, Cherry, Plum and Apple boxes. Climax baskets big and small.

AS YOU LIKE THEM

We have the best equipped mill in the Northwest and manufacture the Ewald patent folding berry boxes, the only folding berry box made of wood veneer that gives satisfaction. Liberal discount on early orders. A postal brings our price list.

FRUIT PACKAGE CO., CUMBERLAND, WIS.

"LIGHTNING" SPRAYERS

AT YOUR DEALER'S OR WRITE US

This pump quickly attached to any barrel by bolting to staves at upper end of barrel. All working parts brass. Requires no priming, brass ball valves and valve seats, paddle agitator, 5-ft. 5-ply hose, brass Vermorel Nozzle, throws any size spray or stream 50 feet and impossible to clog. Adapted for spraying fruit trees, white-washing stables, and various other purposes. Also 15 other styles to select from. For spraying garden vegetables, trees, shrubbery, washing wagons, windows, etc. Write for free catalog and agent's proposition on full line.

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56 Genesee St., UTICA, N.Y., U.S.A. Bbl. Spray Pump

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DOINGS IN APPLE LAND.



The Coronation Ball.

—Spokesman Review.

If the Horse Could Speak.

Written for Green's Fruit Grower by Frank I. Hanson, Mass.

If the horses could express their opinions and desires, no doubt they would talk something like the following:

If I am worth keeping at all I deserve a clean dry bed, and a shelter from cold winds and rain.

When I am frightened try speaking gentle words to me. Ten to one whipping will only make bad matters worse, so I ask you to be gentle but firm.

Please do not cut off my mane and tail, for I need them to protect myself from insects that worry me. I look better with them on, too.

If you have any pity in your heart you will never use a short check-rein. Just think how you would like to have your head drawn into an unnatural position and held there.

Do not forget to blanket me when you stop for more than a very few minutes on a cold day. A bad cold is just as disagreeable to me as it is to you.

Take care that you do not overload me. After I have pulled a load to the top of a hill give me a chance to get my breath.

Do not let anyone use me who will jerk the bits or use the whip too freely. No good horse needs this treatment.

Look at my teeth if I do not eat as a horse should. I may have an ulcerated tooth, or something else, that needs medical treatment.

When it is cold do not put the frosty bits into my mouth. Just warm them in your hand for a few minutes, or you will surely hurt my tongue.

Be sure that the man who shoes me knows his business. Careless shoeing will surely spoil the feet of any horse.

Please remember that of all the animals I am the most abused, so be as kind to me as you can. When I am too old to work keep me if you can afford the expense. But do not sell me to some "jockey" or anybody who will ill treat me. I would rather be killed as painlessly as possible.

Rabbits and Fruit Trees.

Forest Henry tells the "Northwestern Agriculturist" that the simplest remedy for protecting young trees from being girdled by rabbits is to wind them with newspapers. If they are not wound too tightly they may be left on all summer, and thus protect the trunks from sun scald. See to it, however, that the twine that holds the paper on it is not drawn too snug. After the paper is on bank up about six or eight inches of earth. This will keep the mice from working close to the ground, and at the same time, help hold the paper in place. In addition to this, after a heavy fall of snow tramp it around the trees, as rabbits will often cut off the limbs or girdle them if the snow is allowed to pile up around the trees.

Nothing is more discouraging than to have a young orchard ruined by mice and rabbits. A little care in shooting rabbits and winding and banking the trees will save them.

The Food Value of Fruits.

It is not necessary to repeat here what every intelligent person ought to know, namely, that fruit possesses very little food value. It is only refreshing. When preserved or stewed with sugar, however, it furnishes considerable sugar, which is an excellent and necessary part of the winter diet, but there are no nourishing qualities to be found in it. The value of the grape cures and various other fruit cures consists, it is said by those who are authority in the matter, on the rest and complete cleaning out of the system from the over-supply of foods which have been taken before. In the "grape cure" and most of the fruit cures a great deal of water is drunk. The entire system is thus washed out and also given a rest from food except the simple diet of grapes.

It seems to be the general opinion of the best physicians that the majority of people who live above want take more food than is good for them, whence the success of all cures where the amount of food is restricted. The old-fashioned idea prevailed that men or women who had passed their youth needed some stimulus of meat and other strong foods. The opposite theory is now advocated, and less food is recommended for a person in middle age than in youth, when the body has not yet reached its maximum powers. The various diseases of the kidneys and other organs which assist to carry off the wastes of the body are said to arise from excess of food as well as stimulants of all kinds.—N. Y. Tribune.

A Bushel Crate.

Making bushel crates: A very durable, serviceable and convenient crate for handling all kinds of fruits and vegetables, is made of slats are often made of basswood and some times of elm or other woods. Wood for this purpose needs to be light and reasonably tough. The triangular corner posts are made of two-inch elm plank. The crate is sixteen and a half inches long, inside, thirteen and a half inches wide, and twelve and a half inches deep. This holds a bushel when level full, so that the crates may be piled tier upon tier, if desired, without injury to the contents.

The Pig Raises a Kick.

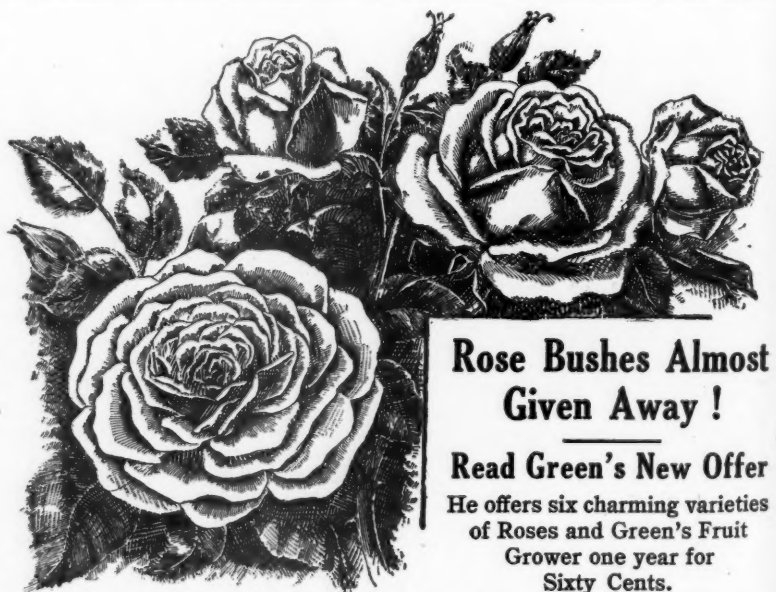
'Twas the voice of the barrow, I heard him declare
I am chilled to the marrow, I need better care.
My sty's in a hollow, the roof's full of leaks;
When it rains then I wallow and raise dismal squeaks.

Me, the farmer is feeding with an eye to my hams
But in spite of my breeding I'm chuck full of oaths.
Can't he see that my shivers shake off all my fat
And a sty full of rivers keeps one weak as a cat."

P. S. The farmer wishes to declare that the old sty, which was only a makeshift erected by his predecessor, has been abandoned; that the new sty is modern in every particular; and that the pig is thriving amazingly in his new quarters.

Double Stubble Trouble!

If you fail to plow under your stubble You'll certainly have extra trouble
Later on, when the weeds,
Grown as tall as your steeds,
Tax team, strength and piety double.



Rose Bushes Almost Given Away!

Read Green's New Offer
He offers six charming varieties of Roses and Green's Fruit Grower one year for Sixty Cents.

Here is a list of the roses to be mailed to you postpaid, one of each of six varieties and GREEN'S FRUIT GROWER one year, all for Sixty Cents.

Climbing Baby Rambler—crimson **Etoile de Lyon—yellow**
Maman Cochet—shell pink **Etoile de France—red**
Kaiserin Aug. Victoria—white **Champion of the World—deep pink**

These six roses are grown in 2 1/2" pots and are such as nurserymen plant by the hundred thousand in carefully prepared fields where they expect nearly every one to grow and form the two year old rose bushes of commerce. These rose bushes can be mailed at any time after February 15. State when you want them sent to you. Plant them in a well prepared bed or in the garden.

C. A. Green considers this one of the most attractive premium offers ever made with GREEN'S FRUIT GROWER, and one which will especially interest the ladies.

Send in your orders now and your subscriptions, stating when you want the rose plants mailed. Safe arrival by mail guaranteed.

GREEN'S FRUIT GROWER, Rochester, N. Y.
Please find enclosed Sixty Cents, for which enter my subscription to GREEN'S FRUIT GROWER for one year, which entitles me to six rose plants, as per offer, to be sent by mail postpaid.

Name _____
Postoffice _____ State _____

Make the Farm More Attractive.

Agricultural papers and periodicals of all kinds have been writing at great length on the subject, "Why the Boys and Girls Leave the Farm." They generally convey the idea that the prime reasons for the farm boy or girl going to the city are the long hours of toil on the farm and the attraction of the glare and glitter of the city. If they are right in assuming these conditions to be responsible for the boy or girl leaving the farm, the surroundings on the farm should be made to approach the attractions of the city, says Pren Moore, Farm Foreman Idaho University Experiment Station.

Make the farm worth while. There are many things that are not of an expensive nature which can be done that would add to the attraction and comfort of the farm. A few trees planted about the farm, will keep fence rows, good fences, an attractive drive to the house and around the farm buildings, flower gardens, a tennis court, and many other things of like nature can be done to beautify, and make more comfortable the surroundings of the young.

A beautiful well kept farm always demands enough greater price when on the market, to more than repay the extra expense necessary for such improvements.

I do not believe that the average farm boy shrinks from farm labor, but that the monotony is too great for him. Give them an interest in the affairs of the farm. Give them the opportunity of

and the direct and indirect absorption of very essential elements and compounds from the air.

Let us consider only the latter source and see what plant food elements the air affords and just how they reach the soil in proper condition for assimilation by growing vegetation.

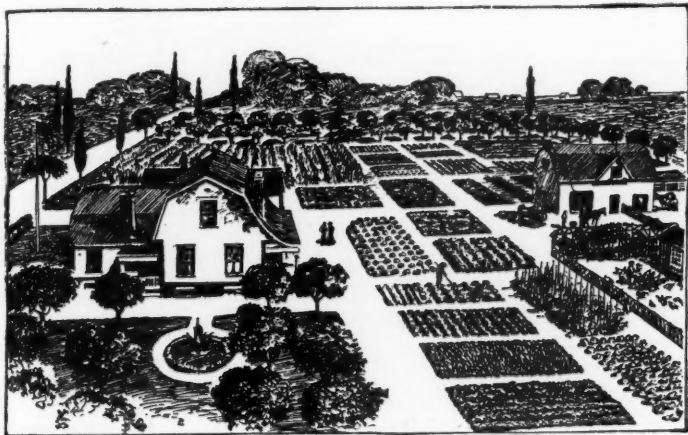
NITROGEN.

Although free nitrogen makes up about four-fifths of the atmosphere, it cannot be used in that state by growing plants. Indirectly, however, free nitrogen of the air can be made use of by legume plants such as clover, alfalfa, peas, beans, and vetch. Strictly speaking, these plants have no power within themselves to assimilate free nitrogen from the air. Owing, however, to certain microscopic organisms living in tubercles or nodules on their roots, the free nitrogen of the air is taken up and united with other elements to form suitable plant foods, not only for the legume itself, but also for other plants that follow.

The nitrogen, in the form of ammonia, nitrates, and nitrites that is always found in the air finds its way to the soil with rain, and snow, and also by direct absorption. Nitrogen in any of these forms is needed by and readily available for all growing plants, says C. W. Colver, Assistant Chemist, University Experiment Station.

OTHER ELEMENTS AND COMPOUNDS.

Besides these elements the air always contains large quantities of free oxygen



In the above illustration readers of Green's Fruit Grower will find suggestions for laying out home grounds, both for garden vegetables, flower garden and fruit garden, and for the arrangement of buildings. I do not like the plan for planting trees as indicated in the above sketch, for they are scattered over the lawn, whereas the trees should be grouped on the borders of the lawn and in front of the trees shrubs should be planted, leaving a wider space of open lawn. I would place the house farther back from the highway than it is placed in the above sketch. I would plant in front of the barn quick growing trees like the poplar, so that the outbuildings would not show from the highway.

the city boy, or girl and they will be more content. The young in the city are not as content as they appear.

A piano in a farm home is as essential as in the city home, it adds to the attractions of the home, and the boy looks forward with much pleasure to the hours after supper, when the day's work is done, for the fire-side pleasures, and he feels that life is not one continuous round of toil and drudgery.

Lime In The Soil.

The most rational use of lime on the soil is to neutralize the soil acidity. The acids found in the soil are products of the decayed organic matter. Most crops, especially the legumes, thrive better in a neutral or slightly alkaline soil, since nitrogen forming bacteria do not properly develop in acid soils, says H. P. Fishburn, Assistant Chemist, University Experiment Station.

Limestone is preferred to burned lime, which on account of its caustic properties is destructive to the organic matter in the soil, unless allowed to air-slake long enough to revert to limestone. The limestone should be finely ground and thoroughly incorporated with the soil. Two tons per acre about every five years is recommended for land that persists in being acid and that seems to do better upon the application of lime. Large amounts are not injurious, but since it is slightly soluble it is better to apply small amounts at regular intervals.

For soils that ought to be limed only once for acidity, a chemical examination would show the correct amount of lime to be applied.

One Source Of Plant Food.

There has been so much consideration given to the exhaustion of soils by such agents as cropping and drainage that the careful reader at once advances the question: Where does the soil get all the necessary elements for plant growth?

The losses of plant food from any soil are, to a certain extent, off-set by the plant foods that are returned to it in any one of a number of ways, the most important of which are, the application of fertilizers, both the commercial products and the ordinary barn-yard manure,

and varying amounts of sulfates, chlorides, carbon dioxide, and moisture. Like the nitrogen and its compounds, these plant foods enter the soil with the precipitation.

It is needless to say that, with the exception of free nitrogen and free oxygen, the total amount of plant food elements contained in the air at any one time is always extremely small, but, on the other hand, it should be clearly understood that it is by no means negligible.

How to Have Fresh Rhubarb During The Winter Months.

Fresh rhubarb can be easily raised during the winter after the season out doors is over. All that is requisite in the way of room is a warm cellar or basement. As soon as the late fall arrives, dig up the roots, allowing as much dirt to adhere as possible, and pile them up on the north side of some building to prevent alternate freezing and thawing. When winter arrives bring the roots into the cellar and plant them out close together in shallow bins or boxes with a little soil between them. The soil should not be kept wet, but simply moist and mellow in order to allow a good circulation of air around the roots.

Shoots grown in this manner are remarkably tender and of an excellent flavor. In order to obtain a supply over a long period they should be set out about every two weeks. At the end of a month the roots are usually exhausted. Roots forced in this manner are worthless for planting out again in the spring. —O. M. Osborne, Agricultural Editor, University Experiment Station.

After the terrific windstorm this county should be rid of crow for some time to come. About five thousand of them were killed on the farm of William Logue. All the shocks of fodder in a large field were torn down and scattered over the place, and roosting in the field and the nearby trees was an unusually large flock of crows. The wind picked the birds up like thistle down and tossed them against fences and trees, tore them out of their roosts in the branches, twisting their wings, and scattering piles of the dead and crippled crows in the trail of destruction left behind. —Harrodsburg Herald.

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Are the best that money can buy. Sold at lower prices than are asked for inferior outfits.

Power and thoroughness are absolutely essential to success in spraying, and these two features are embodied in the Detroit Spraying Outfit to a much greater extent than in any other. Designed by a practical and successful orchardist. Operated by a 4-horsepower Amazing Detroit Kerosene Engine. Exceptionally high platform enables you to get right to the top of the tallest trees and four full horsepower enables you to

Send for Free Bulletin No. 107 for facts about Profits in Spraying.



Be sure to address your letter to our Spraying Specialist

Drive the Mixture Right Into the Bark

Embodies every convenience. Pump started and stopped from upper platform. Built on a platform of standard width so that it can be placed on any farm wagon. Also can be used as a portable pumping outfit or fire engine. Engine can be quickly removed and used to furnish power for any other purpose. November to May is the time to spray, and after doing your own trees you and the boys can go out and clean up the cost of your outfit in a week by spraying for your neighbors. Write at once for Bulletin No. 107, giving startling facts in regard to the profits to be derived from spraying, together with full and complete instructions, formulae, spraying calendar, etc.

DETROIT ENGINE WORKS

Spraying Dept., Bulletin No. 107, Detroit, Mich., U. S. A.

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HURST POWER SPRAYER ON FREE TRIAL

Our no-money-in-advance plan protects you. If after testing this sprayer you are not satisfied with its work, return it to us—the trial does not cost you one cent. The Hurst is the only power sprayer on the market having a SHORT TURN GEAR. The pressure is regulated by our own device which starts and stops the pumps automatically. No relief valve to cause trouble. Pump operates only when needed. 200 gallon cypress tank, 2 1/2 horse power frost-proof water-cooled engine that never fails, cyclone agitation, large capacity pump, strong and durable. Guaranteed for 5 years. We pay freight.

THIS SPRAYING GUIDE FREE

TO OUR CUSTOMERS

Shows all the different pests and diseases, describes, gives remedy and complete instructions for each in plain language easily understood. This valuable book should be in the hands of every farmer and fruit grower. Write today for our big catalog, condensed spraying guide and special free sprayer offer to first in each locality. Don't delay—write today and save money.

THE H. L. HURST MANUFACTURING CO.
2221 North St., Canton, Ohio



Bucket Pump Price \$3.75 with Extras \$4.42

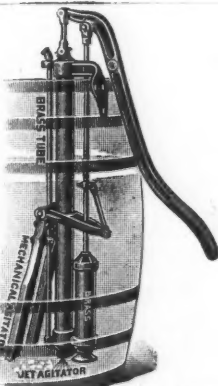
PUMPS

A Bucket Pump: Here is a handy bucket pump. It costs \$3.75 complete as shown in the illustration. If you want a 4 foot extension pipe to hitch on to the rubber hose, it will cost you 35 cents extra. If you want a brass stop-cock on your pump it will cost 50 cents more. By having a stop-cock on your pump you can turn off the spray when the pressure is on and save your spray mixture while moving from one place to another. So we advise you to order one on the pump you buy. Now with all these extras on the pump it will cost you \$4.62. You will notice if you look at this pump carefully that when the bottom of the pump rests in the pail of solution there is a place to put your foot on the pump, which will enable you to hold the pump in position when using it. This pump has an agitator. This keeps the spray mixture stirred up. Then there is a Vermorel nozzle that will throw a fine spray or a solid stream. This pump is all brass except the foot rest and handle, and will do its work well. Remember the complete pump with all extras is \$4.62. Will it not pay you to order one of these Brass Bucket Pumps now?

A Bucket or Half-Barrel Pump: When you receive this pump and want to use it in a small barrel or in a half-barrel, be sure to select a barrel that is water tight. Attach this pump by using a couple of good strong bolts to the barrel. If you use this pump in a barrel you will have to take off the foot rest. This can be done very easily by unscrewing one nut. The price of this pump is \$4.45. It has an agitator to keep the mixture stirred up. It has 5 feet of 3 ply hose and a Vermorel nozzle that will throw a fine or coarse spray. If you want an 8 foot extension pipe to attach to the five foot hose, so you can spray high trees easily, it will cost 53 cents more, that is this pump with extras costs \$4.98. This pump is all brass except the foot rest and handle. The above illustration shows you just how it looks. Will it not pay you to send in your order and become the owner of one of these pumps? Remember the complete Half-Barrel Pump will cost you \$4.98.



Half-Barrel or Bucket Pump. Price \$4.45 Complete \$4.98



Price Complete, a Double Outfit For \$10.00.

A Powerful Barrel Pump: Look at the illustration. It shows you how the barrel pump will look when you have placed it in the barrel. A good kerosene barrel will do. You will have to cut a hole in the top of the barrel large enough (on one side of the top) to get the pump into the barrel. Then bolt it securely to the side of the barrel. (You will notice the three bolts in the illustration.) When you want to move from tree to tree, place the barrel with the mixture in it on a stone-boat and hitch your horse or mule to the stone-boat, and you have an outfit that will spray a large orchard. You will notice the agitator at the bottom of the pump in the illustration—This works up and down when you pump, and keeps the mixture stirred up. Let us receive your order for one of these pumps.

Price No. 5, complete with Mechanical Agitator, 5 feet of three-ply discharge hose and nozzle ready for use. Weight 30 lbs. and 8 feet Extension Pipe for higher trees \$ 8.60

Price No. 6, complete with Mechanical Agitator, two 5-ft. lengths of three-ply discharge hose and two nozzles for spraying two rows at one time, ready for use, weight 40 lbs. and 28-ft. Extension Pipes for higher trees. 10.00

Green's Nursery Company

Implement Dept.

ROCHESTER, N. Y.



FUN FOR THE FAMILY

The Main Thing.—The small boy—"Arf a pound o' yeller soap, please, and muvver says will you please wrap it up in a good love story."—London Sketch.

Expensive Way.—One way of taking the root cure is to wait three hours every day in the anteroom of a fashionable physician.—Kansas City Journal.

You Can Use This.—"You told me this was really cut glass." "So it was. Cut from \$1.00 to 75 cents."—New York American.

Reason Enough.—"Why does the giraffe have such a long neck?" asks the teacher. "Because its head is so far away from its body," hopefully answers the boy.—Judge.

On the Wing.—Tommy—"Pop, what is it that the Bible says is here to-day and gone to-morrow?" "Pop—"Probably the cook, my son."—Philadelphia Record.

Ins and Outs.—Never be in your place of business when a person wants to borrow money of you, because if you are in you will be out, but if you are out you will be in.—London Answers.

A Gentle Hint.—A miserable-sinner-looking clergyman sought advice of an experienced preacher, and was told, among other things, "If you are preaching of hell your ordinary expression of countenance will do; but if you preach of heaven, I should try and look a little more cheerful."—Christian Register.

His Act.—History Teacher—"What was the Sherman Act?" Bright Pupil—"Marching through Georgia."—Pathfinder.

Done and Undone.—Grocer—"Did that watermelon I sold you do for the whole family?" Customer—"Very nearly. The doctor is calling yet."—Toledo Blade.

A Peep.—Wife—"Our new maid has sharp ears." Hub—"I notice that the doors are all scratched up around the keyholes."—Boston Transcript.

When Art Failed.—"And so your young wife serves you as a model. How flattering! She must be immensely pleased." "Well she was at first but when we had a spat and I painted her as the goddess of war, she went home to mother."—Fliegende Blaetter.

Why Delay?—A small tailor in the Twin Cities has a head for advertising. In front of his store stands an oil-barrel with the head knocked in. The barrel is bright green and on it in red letters is painted: "Stand in my barrel while I press your suit for fifty cents."—Zenith.

"Do you think it's possible for a man to live all his life without telling a lie?" "Hardly. Most every man falls in love one time or another."—Cleveland Leader.

A New Ending.—"Have you lived here all your life?" asked the early bird. "Not yet," grinned the earlier worm. "Already," quoth the early bird as he gobbled up the early worm.—Puck.

"My wife is suing me for divorce," sighed the man. "I wish I were dead." "Cheer up, old boy, it's a whole lot better to have your wife spending alimony life insurance."—Detroit Free Press.

"A man who enjoys seeing a woman in tears is a brute." "I don't know about that," replied Miss Cayenne. "One of the kindest husbands I know takes his wife to see all the emotional plays."—Washington Star.

Sure of His Ground.—Among the coffee-drinkers a high place must be given to Bismarck. He liked coffee unadulterated. While with the Prussian Army in France he one day entered a country inn and asked the host if he had any chicory in the house. He had. Bismarck said—"Well, bring it to me; all you have." The man obeyed and handed Bismarck a canister full of chicory. "Are you sure this is all you have?" demanded the Chancellor. "Yes, my lord, every grain." "Then," said Bismarck, keeping the canister by him, "go now and make me a pot of coffee."—Belfast (Ireland) News.

THE LOVE OF A SUMMER DAY.

Written for Green's Fruit Grower by Mrs. Hattie Frahier.

I would rather be crowned with you sweet
Than be king with the fairest queen
I would rather be poor with you sweet
'Neath the shadowing beeches green,
With your cheek on my own cheek dreaming,
And your kisses upon my face,
Than to lie amid treasures dreaming
In another love's embrace.

I would rather be near to you sweet
Than to win an immortal name,
I would rather be dear to you sweet
Than to leave an undying fame,
In minds of a mighty throng sweet
For man's memory fades away,
And there's nothing that lasts so long sweet
As the love of a summer day.

Why Some Men Don't Get Rich.

Written for Green's Fruit Grower by E. E. Hale.

In order to make money you must know when a bargain is offered. You must know how to make a good bargain. But this does not mean that you must take advantage of any person or cheat him.

Several years ago I kept a store at Madison, Wis. Just before Thanksgiving a man called at my store with a large load of dressed chickens.

"Will you buy this poultry?" he asked. "No, the weather is warm and I fear it will not keep."

"Will you make me an offer for the poultry?"

"Yes, I will give you three cents a pound for all you have."

"I will go up town and see what offers I can get. If I can get no better offer I will come back to you," the man replied.

In a little while the man came back and sold me his entire load of poultry which consisted of about fifty fowls all in prime condition and carefully prepared for market. That night the weather became cooler. I packed the poultry in barrels with dry packing material and sold all of it at about eight cents per pound. The man who sold this poultry lost money on it. He was a poor business man. If he had been possessed with a business faculty, he would have found some method of selling his poultry at a better price, even if he had to sell it out to the houses in the town though it might be two days work. A man called at my store one day with a load of ox bows which usually sell for fifty cents per pair at the lowest. He asked me if I would buy the ox bows and I answered no. Then he wanted me to make an offer for his entire load.

My brother had sent me one hundred boxes of garden seeds for which I allowed my brother fifty cents per box, each box consisting of one hundred or more packages of seed. I told the man that I would give him a full box of garden seeds for his ox bows, not expecting that he would accept it, but he did accept, and I piled up the ox bows in the rear of my store. Not long after a man from my town where oxen were largely used happened to see this pile of ox bows. "Can I sell you some of the ox bows?" I asked. "Yes," he replied "if I can buy cheap enough." I offered them to him in quantity for thirty-five cents and he took twelve pair. Later he came back and bought all of the ox bows that were remaining. He had peddled them out to his neighbors. The man who made the ox bows and lost money on them should have looked around and discovered this town where ox bows were in demand, instead of trying to sell them in a town where no ox bows were used.

There are men who have such a keen sense of business, they can almost scent business as a hound scents a coon or deer. No man can expect to make money without having a business faculty.

About Leaving Labels on Trees.

A reader from Arkansas asks Green's Fruit Grower whether it is best to leave wooden labels upon apple trees all the year. We assume this man has reference to the labels attached by a wire to trees by nurserymen when they are sold. It is not safe to leave these labels upon the trees, since the tree will grow and expand, and the wire will cut into the bark and some times into the wood so that the tree will break off where the label is attached. If the wire on the label is attached to a branch it could not do much harm, but if bound around the body of the tree, as it often is, it would be apt to do serious injury.

If you desire to have a label upon each tree you should have a wooden tag four to six inches long, painted with white lead; write the name with a lead pencil before the paint is dry, thus making an indelible mark, then attach the label to a branch of the tree with copper wire large enough to stand the wear and tear, and leave plenty of space, using sufficient wire to allow for expansion of the tree in growing.

In planting an orchard, the best plan is to make a record in your account book of the different varieties in different parts of the orchard. Many fruit growers have a map of the orchard, showing each row and the varieties on each row. In addition to this you should have a tag, as I have spoken of, attached to the first tree of several of the same varieties.

ORDER YOUR PUBLICATIONS THROUGH GREEN'S FRUIT GROWER

TELL US JUST WHAT YOU WANT!

Over 10,000 orders were placed through us last year.

GREEN'S FRUIT GROWER CLUB OFFER

SPECIAL COMBINATIONS

In the following combinations Green's Fruit Grower is clubbed with various horticultural, agricultural and literary magazines together with the price of each and a special clubbing offer for the combination. Send us the special clubbing price and we will have the various periodicals sent to your address.

Regular Price.	Combination	Regular Price.	Combination
New York Tribune Farmer, 1 yr. \$1.00	Cosmopolitan Magazine, \$1.50		
Green's Fruit Grower, 4 yrs. 1.00	Green's Fruit Grower, 4 yrs. 1.00		
2.00	1 00	2.50	1 50
New York Tribune Farmer, 1 yr. 1.00	Farmer's Voice,50		
Cosmopolitan Magazine, 1 yr. 1.50	New York Tribune Farmer, 1 yr. 1.00		
Green's Fruit Grower, 4 yrs. 1.00	Cosmopolitan Magazine, 1 yr. 1.50		
	Green's Fruit Grower, 4 yrs. 1.00		
3.50	2 25	3.00	3 00
Farm Journal, 2 yrs.50			
Green's Fruit Grower, 4 yrs. 1.00			
1.50	1 00	4.00	1 00
Cosmopolitan Magazine, 1 yr. 1.50	New York Tribune Farmer, 1 yr. 1.00		
Farm Journal, 2 yrs.50	Hampton's Magazine, 1 yr. 1.50		
Green's Fruit Grower, 4 yrs. 1.00	Green's Fruit Grower, 4 yrs. 1.00		
Cornell Egg Book,25			
3.25	2 25	3.50	2 50
Cosmopolitan Magazine, 1 yr. 1.50	American Magazine, 1 yr. 1.50		
McCall's Magazine, 1 yr.50	Woman's Home Companion, 1 yr. 1.50		
Cornell Egg Book,25	Cosmopolitan Magazine, 1 yr. 1.50		
Farm Journal, 2 yrs.50	Green's Fruit Grower,50		
Green's Fruit Grower, 4 yrs. 1.00			
3.75	2 50	5.00	4 00
Farm and Fireside (24 Nos.) 1 yr. .50	Green's Fruit Grower50		
Green's Fruit Grower, 4 yrs. 1.00	American Poultry Advocate,50		
	Gardener's Chronicle, 1.00		
1.50	1 00	2.00	2 00
Farm and Fireside (24 Nos.) 1 yr. .50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Human Life, 1.00		
Green's Fruit Grower, 4 yrs. 1.00	Success Magazine, 1.00		
3.00	2 00	1.00	1 90
Farm and Home (24 Nos.) 1 yr. .50	Green's Fruit Grower50		
Green's Fruit Grower, 4 yrs. 1.00	Tribune Farmer, 1.00		
	Practical Farmer, 1.00		
1.50	1 00	3.00	3 00
Farm and Home (24 Nos.) 1 yr. .50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Suburban Life, 3.00		
Green's Fruit Grower, 4 yrs. 1.00	Success Magazine, 1.00		
3.00	2 00	3.75	3 75
Farm and Home (24 Nos.) 1 yr. .50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Harper's Bazar, 1.00		
Green's Fruit Grower, 4 yrs. 1.00	Success Magazine, 1.00		
3.00	2 25	1.00	2 20
Woman's World, 1 yr.25	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Farm and Home,50		
Green's Fruit Grower, 4 yrs. 1.00	American Farm World,50		
Farm Journal, 2 yrs.50			
Cornell Egg Book,25			
3.50	2 00	2.20	2 20
Woman's Home Companion, 1 yr. 1.50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Farmer's Voice (semi-mo)50		
Green's Fruit Grower, 4 yrs. 1.00	Irrigation Age, 1.00		
	Ranch and Range, 1.00		
1.00	3 00	1.50	1 50
Woman's World, 1 yr.25	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Reliable Poultry Journal,50		
Green's Fruit Grower, 4 yrs. 1.00			
4.00	2 00	1.50	1 50
Hoard's Dairyman, 1 yr. 1.00	Green's Fruit Grower50		
New York Tribune Farmer, 1 yr. 1.00	Reliable Poultry Journal,50		
Green's Fruit Grower, 4 yrs. 1.00	Farmer's Voice (semi-mo)50		
	Farm Journal, 2 yrs.25		
3.00	1 00	3.00	4 20
Woman's Home Companion, 1 yr. 1.50	Green's Fruit Grower50		
Rural New Yorker, 1 yr. 1.00	Munsey's Magazine, 1.00		
Green's Fruit Grower, 4 yrs. 1.00	Suburban Life, 3.00		
	Ranch and Range,50		
1.50	3 00	2.50	2 50
Woman's Home Companion, 1 yr. 1.50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Farm Journal, 5 yrs. 1.00		
Green's Fruit Grower, 4 yrs. 1.00	Country Gentleman, 1.50		
3.50	2 60	2.00	2 00
Woman's Home Companion, 1 yr. 1.50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Pearson's Magazine, 1.50		
Green's Fruit Grower, 4 yrs. 1.00	Harper's Bazar, 1.00		
3.50	3 00	4.00	4 00
Woman's Home Companion, 1 yr. 1.50	Green's Fruit Grower50		
Cosmopolitan Magazine, 1 yr. 1.50	Review of Reviews, 3.00		
Green's Fruit Grower, 4 yrs. 1.00	Woman's Home Companion,50		
	Success Magazine, 1.00		

OTHER SPECIAL CLUBBING OFFER AS FOLLOWS:

GREEN'S FRUIT GROWER ONE YEAR

With Agricultural Epitome, m. 1 yr. \$.50	With Hunter, Trap, and Dog, m. 1 yr. \$1.25
American Agriculturist, m. 1 yr. 1.25	Inter-Ocean, w. 1 yr. 1.00
American Boy, m. 1 yr. 1.10	Indiana Farmer, w. 1 yr. .85
American Bee Journal, m. 1 yr. 1.00	Inland Poultry Journal, m. 1 yr. .60
American Cultivator, m. 1 yr. 1.00	Iowa State Register, w. 1 yr. .75
American Poultryman, m. 1 yr. .65	Ladies' World, m. 1 yr. .80
American Magazine, m. 1 yr. 1.50	Kimball's Dairy Farmer, s. m. 1 yr. .75
American Farm World, m. 1 yr. .75	La Follette's, w. 1 yr. 1.00
Am. Poultry Advocate, m. 1 yr. .75	Live Stock Journal, w. 1 yr. 1.00
Am. Poultry Journal, m. 1 yr. .75	McCall's Magazine, m. 1 yr. .85
American Swineherd, m. 1 yr. .75	Maine Farmer, w. 1 yr. 1.00
American Threshermen, m. 1 yr. 1.00	Market Growers Journal, w. 1 yr. 1.00
Breeders' Gazette, w. 1 yr. 1.40	Mich. Poultry Breeder, m. 1 yr. .70
Beekman's Review, m. 1 yr. 1.25	Mo. and Kan. Farmer, w. 1 yr. .60
Boy's Magazine, m. 1 yr. 1.10	Missouri Val. Farmer, w. 1 yr. .65
Chicago Inter Ocean, w. 1 yr. 1.00	Modern Priscilla, m. 1 yr. 1.00
Cosmopolitan, m. 1 yr. 1.00	Mother's Magazine, m. 1 yr. 1.00
Country Gentleman, w. 1 yr. 1.75	Munsey Magazine, m. 1 yr. 1.00
Comfort Magazine, m. 1 yr. .75	National Stockman & Farmer, w. 1 yr. 1.35
Delineator Magazine, m. 1 yr. 1.20	National Swine Magazine, s. m. 1 yr. .75
Designer (The), m. 1 yr. 1.00	New England Homestead, w. 1 yr. 1.25
Dressmaking-at-Home, m. 1 yr. 1.25	N. E. Poultry Journal, m. 1 yr. .75
Everybodys' Magazine, m. 1 yr. 1.80	Needlecraft, m. 1 yr. .60
Every Woman's Mag., m. 1 yr. .75	N. Y. World (Tri-weekly), m. 1 yr. 1.10
Farm Life, m. 1 yr. .75	N. W. Farm & Orchard, m. 1 yr. .60
Farm and Fireside, s. m. 1 yr. .75	Ohio Farmer, w. 1 yr. 1.00
Farmer's Voice, s. m. 1 yr. .75	Pacific Poultryman, m. 1 yr. .75
Farm and Home, s. m. 1 yr. .75	Pathfinder, w. 1 yr. 1.00
Farm Journal, m. 2 yr. .75	Poultry Magazine, m. 1 yr. 1.00
Farm News, m. 1 yr. .60	Poultry Review, m. 1 yr. .75
Farm Poultry, s. m. 1 yr. .70	Poultry Tribune, m. 1 yr. .60
Farmer's Wife, m. 1 yr. .60	Poultry Keeper, m. 1 yr. .75
Farmer's Guide, w. 1 yr. 1.00	Poultry Success, m. 1 yr. .75
Farmer and Stockman, w. 1 yr. 1.10	Practical Farmer, w. 1 yr. 1.25
Farmers' Advocate, w. 1 yr. 1.00	Pictorial Review, m. 1 yr. 1.25
Farmers' Tribune, w. 1 yr. 1.00	Railroad Man's Magazine, m. 1 yr. 1.40
Farm Stock and Home, s. m. 1 yr. 1.00	Review of Reviews, m. 1 yr. 3.00
Field and Farm, w. 1 yr. 2.20	Rural New Yorker, w. 1 yr. 1.25
Floral Life, m. 1 yr. .75	Reliable Poultry Journal, m. 1 yr. .75
Fruit Belt, m. 1 yr. .75	Sabbath Reading, m. 1 yr. .90
Fruit Grower, m. 1 yr. 1.00	Southern Fruit Grower, m. 1 yr. .75
Fruitman and Gardener, m. 1 yr. .75	Successful Farming, m. 1 yr. 1.25
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Good Health, m. 1 yr. 1.50	Sunset Magazine, m. 1 yr. 1.50
Good Housekeeping, m. 1 yr. 1.40	Swine Magazine, m. 1 yr. .50
Good Literature, m. 1 yr. .75	Swine Breeder's Journal, m. 1 yr. .75
Garden Magazine, m. 1 yr. 1.50	Technical World Magazine, m. 1 yr. 1.50
Girls' Companion, w. 1 yr. .75	Travel Magazine, m. 1 yr. 2.75
Hampton's Magazine, m. 1 yr. 1.50	The Standard and Poultry World, m. 1 yr. .75
Hoard's Dairyman, w. 1 yr. 1.15	The Michigan Farmer, m. 1 yr. 1.00
Household Journal, m. 1 yr. .60	Uncle Remus's Magazine, m. 1 yr. .50
Housekeeper, m. 1 yr. 1.50	Up-to-Date Farming, w. 1 yr. .50
Housewife, m. 1 yr. .75	Woman's Home Com., m. 1 yr. 1.25
Human Life, m. 1 yr. 1.00	Woman's Nat. Daily, d. 1 yr. 1.25
Home Needlework Magazine, m. 1 yr. 1.00	Woman's Home Journal, m. 1 yr. .60
Harper's Bazar, m. 1 yr. 1.35	Youth's Companion, w. 1 yr. 2.00

GREEN'S FRUIT GROWER, ROCHESTER, N. Y.

A Visit to Dreamland Farm

Written for Green's Fruit Grower.

I had been fanning myself by the roadside near my farm home looking down the road way to the north. By and by I saw something coming in a cloud of dust. Later there appeared in the distance a big automobile filled with over twenty men and women. As it came near the man with a megaphone called out, "This is the farm home of James Percooler, the noted horticulturist." This is one of the most fertile farms in Monroe County. Here are produced the finest apples, peaches, pears, quinces, grapes and berries.

The big automobile with its many seats all filled, with passengers stopped a moment and I stepped on board. I was seated by a short fat lady to whom I was promptly introduced. She had curly hair. I confess of having a weakness for curly hair. The first girl I ever fell in love with wore long and beautiful curls. We were off for a picnic. I have never taken much interest in picnics except family affairs. As a boy I attended many Sabbath School picnics and found them somewhat dreary. As a young man my experience was that it usually rained at the picnic so far as I can remember, and that there was no fun in driving home five or six miles through the drenching rain, in a carry-all filled with boys and girls, each couple carrying an umbrella, the drippings of which trickled constantly over my ears and down behind my collar.

"It is a fine day," I said to the little blue-eyed woman at my side.

"Beautiful day," she replied.

"Are you fond of books?" I asked. At this the megaphone man was ready for another speech.

"This is the home of Chauncey M. Depew, known the country over for his gift of story telling. The large tree which you see directly in front of the house is a chestnut."

"Are you fond of books?" I asked again of the blue-eyed woman.

"I am passionately fond of books, I could almost eat them."

"Have you read Paul and Virginia?"

"I have read Paul," she replied.

"Are you fond of poetry?" I asked.

"I am passionately fond of poetry," she replied.

"Who is your favorite author?" I asked.

"Mark Twain," she replied.

"Are you fond of art?"

"I delight in paintings. They are the thing I inquire about when visiting a city for the first time."

"What branch of art are you most interested in?"

"In still life, in paintings of tea-pots, kettles, and of fish if they are represented as fresh. I cannot abide stale fish even in a painting."

Then the megaphone man cried, "This is the home of Congressman Cannon. You will not see any cannon about his place, but here you will see some of the best bred cattle and most productive fields and orchards. The distinguished owner may be seen hanging out clothes in the back yard and smoking a large cigar."

We had not gone far before one of our party called out for the driver to stop the car as he had seen a man by the wayside with whom he wished to speak. As the car stopped, an aged gentleman standing by the way-side viewed us with an inquiring look. The man who had asked to have the car stopped said, "I desire to shake hands with you sir. Thirty years ago you did me a great favor. At that time I had left the city a poor man and had located upon a farm in this locality, hardly knowing which way to turn for money. You purchased my crop of wheat agreeing to pay me a certain sum. When I delivered the wheat you gave me more money than I thought I was entitled to. When I informed you of this fact, your reply was that the wheat was better than the sample, and for this reason you paid me a better price. Your conduct in this instance was remarkable. I have since become a rich man. I desire now to thank you and to say to you that I have the greatest respect for your honesty and integrity."

After going on for several miles the megaphone man made his last announcement: "We are approaching Dreamland Farm, one of the most famous the world has known. Here our picnic will be held. Here you will discover remarkable achievements in agriculture, horticulture, in gardening and in landscape gardening."

THE OWNER OF DREAMLAND AND HIS FARM EQUIPMENTS.

He was a little man with a big fat, red face, daintily dressed, who came forward to greet us on our arrival at Dreamland farm. Here was a man full of character and dignity and yet one with a merry twinkle in his eye.

Without much ado he proceeded to lead the way to his house which was built entirely of cement and entirely fire proof.

Even the floors were of cement, and the large porch was also of cement. There was one large room in the center of the house occupied as a living room, large enough to accommodate forty or more people at one time. There was no parlor, or room set apart exclusively for guests which is usually the laughing stock of sensible people. In this large living room was an immense fire place; off from one end of this large room was the office and private rooms of the proprietor; off from the opposite end was the kitchen and house maid's bedroom, and her private room for entertaining guests, which was equally as good and comfortable as those of the proprietor.

"How few there are," I exclaimed, "who provide a room for the house-maid, where she can welcome her guests, either male or female, yet how desirable such a room where a house-maid is employed."

The rooms on the ground floor were large and airy. There was one outdoor room roofed with canvas, called the health room, where certain members of the family slept summer and winter, not minding the cold blasts or the occasional sifting in of winter snow. The roof of the building was of slate and fire proof.

Then we were led out to an expansive lawn where members of the family were playing croquet. From this lawn was a shady avenue leading to the distant fields, the orchards, berryfields and vineyard. Here we found blooded cattle, and carefully bred poultry, all looking sleek and happy, all seeming to know their master and to welcome his approach.

The apple orchard bore evidences of careful attention. Half of the fruit had been removed by hand early in the season, and that remaining gave promise of being

of large size and rare beauty. The same was true of the peach, plum, pear and quince orchards. Even in the vineyard surplus or small clusters had been thinned out, giving a better opportunity for the larger clusters to develop to their fullest extent.

Is there anything more beautiful than a well kept orchard of apples, pears, plums or quince? I could never tire of looking at the graceful curves of the vines in the vineyard, of wandering among the rows and seeing the beautiful tinted fruit coming into maturity. How beautiful are the long rows of red raspberries; even black cap raspberries which are red before they are ripe are remarkably attractive.

Soon we heard the rippling of water and found ourselves on the shore of a brook which led into a pond well stocked with trout. There were rustic bridges leading over this brook.

Entirely secluded from the farmer's residence was a little village made up of cottages for laborers. Each laborer and his family had a separate cottage, cool and comfortable, with lawn and garden for each. How much better, thought I, to have the laborer live at home than to board with the family of the owner of the farm, better not only for the laborer himself but for the wife and daughters of the farmer.

As yet we had not seen any barns or out buildings but now we came upon them unexpectedly. They were sheltered or screened by tall growing trees therefore were not a blemish on the landscape. The open space about and between the barns was covered with gravel, and thus were free from mud at all times of the year. I looked in vain for a windmill. The proprietor said he preferred a gasoline engine to pump water for the cattle and to provide pressure for the water-

works of the house. This little engine required no attendance, the only thing necessary was to keep it well supplied with gasoline, the parts well oiled, then it ran on ceaselessly day in and day out, year after year. It was a small affair, yet it possessed marvelous ability. The proprietor said he had another similar engine for pumping water for irrigation purposes, but this engine was not always necessary, yet occasionally it was possible to save a crop of fruit or grain by irrigation.

At the other side of the estate was a large timber tract, largely on low ground, not considered valuable for farming purposes or fruit growing. As we wandered into this woodland we were surprised by the uprising of numerous game birds, such as quail, wood cock, partridge, and by the bounding away of deer and other large game.

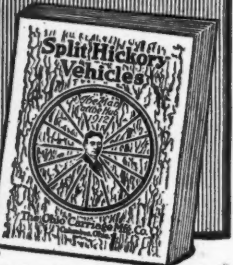
"Are you not lonesome out here in the country? Do not your wife and children long for the social attractions of the city?"

"Not at all," replied the proprietor. "When I located here I arranged for number of my friends to locate in the same vicinity. I entertain my city friends and in turn I am entertained by them. I do not consider myself tied to this place. I have competent foremen, thus I can go away for weeks at a time, or even for months, in case I desire to take a European trip. There is an apple expert in charge of the apple orchard, another expert who attends to the grapes and so on."

"You do not run this place for profit do you?" I asked.

"My main object in establishing this place was not for money making, but I keep a careful account of everything I pay out, and everything I receive, and this farm is paying good dividends on the money invested."

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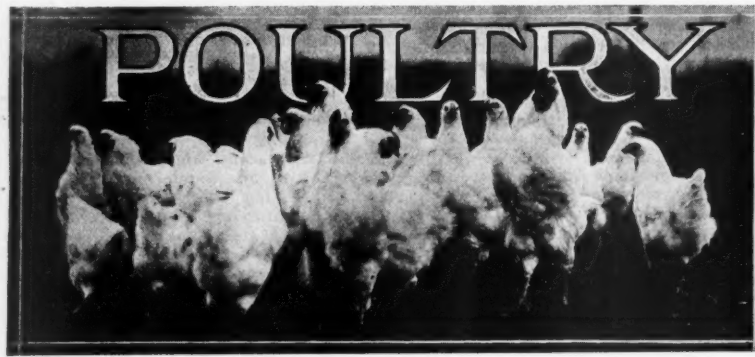
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Around the Poultry House.

Written for Green's Fruit Grower By Frank I. Hanson.

Keep a few Guinea hens around the farm. They are great hawk chasers. Study! Be patient!! Succeed!!! When a hen is happy she sings, and when she sings she means business. Keep them happy.

Keep watch for the drones among the layers and put them in the fattening coop for the market.

There is genuine satisfaction in owning thoroughbred stock and they cost no more to feed. Go in for the best.

The smaller the quarters the greater the care. Crowded fowls are much more liable to become affected with vermin and disease.

A bone cutter will surely pay for itself. Green cut bone supplies the hen with ability to produce eggs, nourishes her feathers, and keeps her in general good health.

Gather the eggs with such regularity that none will be left to become stale. One bad egg in a market casts suspicion upon the entire lot. It pays to be careful.

Here is a good suggestion. Nail a tablet of paper near the hen house door and when a good idea occurs to you write it down. A daily record of the egg production should be there, too.

When economy is a hobby, patience the motto and good judgement a daily practice, the poultryman's reward is pretty sure to be success.

That old maxim, "Whatever is worth doing at all is worth doing well," particularly applies to the poultry business.

When the fowls flee from you with fluttering and squawking it is your fault. Better remedy the unnatural condition at once.

Give the fowls a basketful of that chaff from the bottom of the haymow. They will enjoy looking it over, and to your profit.

Do you like to see a sick fowl? If the bird is not of more than ordinary value, and the disease is serious apply the ax with a steady hand.

Have you ever noticed the hens following the plow and did you observe how fast the grubs disappeared? This is good for the hens and the land also. Encourage them.

To reap profits from poultry the flock must be separated into pens of small numbers. Overcrowding is one of the greatest mistakes, and this has been demonstrated.

Once a week give the drinking dishes a scrubbing and scald with hot water in which a small quantity of common baking soda has been dissolved.

The Individual Hen.

Written for Green's Fruit Grower By Jennie E. Stewart.

The man who is breeding fancy stock is personally acquainted with each individual in his flock. He knows her possibilities, her peculiarities and her pedigree. In starting a new flock it is to your future interest to get you foundation stock from such a breeder. If you are buying new cockerels to head your old flock it is equally important that you get them from a careful breeder. The great trouble with farm poultry is, that it is permissibly bred and lacks uniformity. The birds are left to shift for themselves or are child-fed and the owner knows nothing of the individual birds or their qualifications as a breeder or egg producer. Very often the best birds in the flock are sacrificed on the table or the market with no thought as to their individual worth on the farm. Even the farmer must study the individuality of his hens if he expects to make a paying business out of poultry raising, or even if he expects to make a nice little sum from them as a side issue.

In every flock are hens that are worth their weight in gold as a layer and, because of their laying qualities, as a breeder. There are others that are drones in the flock and a positive menace to the best interests of the flock because what few eggs they do produce are laid at the season when eggs are most in demand for hatching and thus they make a great mark on the progeny resulting from a

season's hatch as the good ones which have been laying all winter. It is impossible to distinguish these fair weather layers from the good old standbys when breeding season comes. They are apt to be the sleekest hens in the flock at that season because they have not been using up their strength in producing high priced eggs all winter. If you took pains to observe the hens that kept steadily at it all winter and can pen a few of these for your season's breeders you will lay the foundation for a grand laying flock. Let the others lay for market and to produce chicks for the market but rear your next winter's pullets from this pen of winter layers. Should you get only fifty nice pullets you will get more eggs I can assure you than from 150 of the haphazard kind.

One season of this will revolutionize your flock, mate the best of them to some cockerels from a trap-nested, egg laying flock and in two years more you can have four times the eggs in winter that you now receive from the same number of hens. Will it not pay you? It costs no more to feed a hen bred in generations of laying than the merest drone. If you do not feel able to spend the time on a pen of hens watch a few of these best ones, note where they lay and keep every one of their eggs for hatching. Kill off or sell the hen that mopes about on the roosts all day, coming down only to eat her fill. She is pretty sure to be one of the non-layers. Get her out of the flock. Do not allow a sick hen to remain in the flock at breeding season, if she has been very sick do not keep her even though apparently recovered. These are the kind that lay a few eggs during the breeding season and bring a lot of weak puny chicks into the world to cause you trouble for seasons to come by impairing the vigor of a flock. It may seem hard to kill a hen just because she has been sick, but killed or marketed she should always be. In breeding season every hen will lay that is not actually nearly dead, for it is the natural season for laying. I've heard it said that a sick hen will not lay but I know this is not true. They do not lay many eggs it is true nor keep it up long, but I have seen hens get off the nest when they were so weak and sick they could hardly walk. Their egg was just as likely to be included in the next hatch as any unless the owner was on the lookout for such things.

It is only by bringing every individual in the flock up to at least an average of 140 eggs a year that we can hope to get poultry rearing on a paying basis. That many flocks are doing better than that is being proven every day. That many fall far below that average on the farm is deplorable. But it takes more than egg laying ancestry to get a flock up to a high standard of laying. No hen can produce her greatest number of eggs without proper feed, care and housing. But she will do her part if you do yours. Remember a good hen is like a good machine she needs intelligent handling to keep her machinery in good running order.

Does The Cockerel Cause The Sun To Rise?

Written for Green's Fruit Grower.

A French poet has written one of the most poetical plays ever written, yet the play takes place in one of the most unpoetical places of all, that is in a barnyard. There are no men or women in this play. All the characters are taken by cocks, hens, peacocks, guinea hens, dogs, doves and a cat. The cockerel firmly believes that the sun would not rise and that darkness would prevail all day long if he did not crow at an early hour each morning.

There are many human beings who have as exaggerated an opinion of themselves as has this cockerel. These conceited people think the world would not move if they should stop pushing it for an hour. This cockerel thought he had a wonderful voice, of which he was very proud, but when later in life he heard the nightingale sing, he chided his companions for not having exposed his monstrous conceit in regard to the melody of his own song or crow.

Everything in the play is typical and poetic. For instance, the cockerel tele-

phones to his friend through a flower, the shape of which resembles a telephone. The woodpecker appears from a hole in a big tree and together with an old hen in a basket makes an occasional wise remark.

Old Time Poultry Keeping.

Written For Green's Fruit Grower.

I often recall the methods of poultry keeping employed on my father's farm when I was a child years ago. My father kept much poultry, although he never considered himself a poultry specialist. This poultry had the run of big grain barns. One of my pastimes on the old farm was in gathering the eggs from nests made in the big mows of hay, wheat, barley, oats and cornstalks which were stored in the big barns. It was not unusual to gather nearly a half bushel of eggs on a single day in the summer season. The favorite place for the hens to make nests was under the flooring of the barn, a difficult place to approach, for there was only eighteen inches between the flooring and the ground, and nobody but a boy could crawl under this flooring, so I was the boy to do that work. Often in a far corner I would find a nest with a dozen or more eggs.

I cannot remember any poultry house on the old homestead farm. No one thought of feeding chickens anything but grain, therefore as may be expected, our winter supply of fresh eggs was limited. At that period no one had thought of supplying green food for the hens in the way of beets, cabbage or turnips, or feeding the poultry ground bone or mat. At Green's Fruit Farm we now plant a field to beets. We fasten these beets to the ceiling of the poultry houses by a cord, which holds the beets about a foot from the floor. The hens peck at the beets all day long, getting considerable exercise as well as healthy nourishment. We also supply the poultry with cracked bone from the butcher's, and broken oyster shells and gravel, and have bins in which they can dust themselves.

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NEW INDUSTRY FOR PENN. YAN.

WILL RAISE GUINEA FOWL ON LARGE SCALE.

Only Second Farm in State.

About seven acres of farm land are being fenced off from the Clinton B. Struble farm in the town of Jerusalem, near Branchport, on which Mr. Struble and Wendell T. Bush will establish a guinea fowl farm, the second of its kind in the state. A number of individuals raise these fowl, but in small numbers.

There are between two and three acres of woodland in the portion to be fenced off, such being necessary for the successful raising of guinea fowl. Another thing essential is a plentiful supply of water, which this farm has. A wire fence 12 feet high will inclose the farm. Young oak trees were cut from the woodland and will be used as posts on which to fasten the wire fencing. Coops twenty feet long, six feet wide, five feet high in front and three feet high in the rear will be built, and each coop will house 75 to 100 guineas. 500 fowl have been contracted for, half of which number are males and half females.

Guinea hens will nest on 17 to 20 eggs, and the proportion that hatch out is greater than in the case of chickens. In the woodland the guinea hens will make their own nests, which must not be disturbed during the hatching process, else the hen will abandon her nest and never again go near it.

The cleared land will be sown to buckwheat and barley, on which the guineas will feed, as well as on insects. The fowl will be allowed to roam all over the woodland, and they require very little attention. The farm will take care of 1,500 guineas, and it is expected that the feathered population will increase to that number. The severe restrictions placed on game birds opens up, it is said, a good market for guinea fowl. Not enough game birds can be killed now to satisfy the demands of the higher class hotels and restaurants, and while the guinea is classed in the larger cities as a game bird, it is classed as domesticated by the state when raised in an enclosure.

The farm will be in charge of Chris Larsen, who is overseer of the entire Struble farm. Mr. Bush, who is a member of the Bush Terminal Company, of Brooklyn, will give a great deal of attention to the enterprise.

Concerning Red Tops.

P. G. Phillips of 247 Central avenue has 60 hens and has gathered 7,000 eggs from them since Jan. 1st. Says Fredonia Censor. He is a very scientific poultryman. Miss Cushing of Forest Place is gathering eggs from white leghorn pullets hatched in May. The editor gathers one egg a day from his Arkwright flock of 30, but their combs are red, which Justice Clough says is a sign of good intentions. If the eggs are not forth coming soon the top of the editor's head will be red with anger and there will be a hatchet in the air.

The Guinea Hen.

There is an effort on foot to establish farms where wild game birds may be raised for commercial purposes. To the bird lovers and those who see what a loophole of escape this offers to the pot-hunters, the stronger the laws are made to guard against the "game farm," the better are they satisfied. Says one of our Exchange.

But there is a bird right at our doors, with the tasty white flesh of a grouse which is all too much neglected, though some farmers keep a pair on account of their warning cries when hawks appear. The bird referred to is the guinea hen. The eggs are of slight value on the table, for they have an unpleasant gamy flavor, but the flesh of the adult bird is delicious. The young guineas may be broiled, the yearlings roasted, the only precaution necessary is that strips of fat pork, salt of course, be bound upon the breast as it is somewhat dry.

The guinea is an industrious layer, beginning in April and keeping busy till October. The best plan with the early sets of eggs is to hatch them beneath hens, and not to allow the guinea to mother them until at least July. As all the guinea hens lay in one nest it is easy to get a set, remembering to lift them from the nest with a wooden spoon, for if the hens, think their nest has been meddled with they will not return to it. The nest is commonly hid well away beneath some sheltering bush, and we have seen some with thirty or more eggs in them, the product of the flock, for these birds have a way of slipping through the long grass which makes them hard to find. The hen has a habit of giving a shrill cry as she comes off the nest, and this is the way to discover her hiding place. The young guineas are very pretty little speckled brown birds, but as delicate as young turkeys. We have seen nineteen, the whole of a flock, die in one night. Rats are a great enemy also.

But if they are not hatched too early they can be easily raised, the cock bird sharing with the hen the task of caring for them. The male bird has the most unpleasant voice and an ability to see enemies at a great distance. He tells his alarm immediately and at length, and all birds within range of his voice immediately seek cover.

The Little Leaks.

Recent years have seen a marked change in the attitude of the usual farmer towards the chicken industry. Instead of looking upon the hens as a nuisance to be tolerated because it pleased the women and children to be fussing with something, he has begun to regard them as one of the profitable assets of the farm. He has begun to exercise more business judgment in the proper care and handling of the poultry and poultry products. He realizes that in this as in any other branch of the poultry industry he must guard against the little leaks that help to eat up profits.

One of the first signs that points to the interest of the men folks in the poultry on any farm is the improvement in housing and working apparatus. A woman will usually try to get along on any old makeshift but when her husband gets interested there always comes new improvements. Good comfortable housing is one of the best aids to poultry success without it there can be no profits. But there are many little leaks that the average busy farmer does not look after unless they are called to mind in some more or less forcible manner.

One of the usual sources of loss on the farm is overfeeding of the laying hens and growing stock. More farmers have their stock too fat than otherwise. One reason for this is, they run all over the farm, eating with other stock all they need, then are fed a meal of their own, night and morning, with no attempt to balance the ration. The farmer should endeavor to keep a watch out for this and if any grain be given fowls on free range, study to have it of such as will balance what they secure for themselves. And have it not too generous. When you wish to market some fowls fatten them separately for the purpose and in confinement. You would not feed your cows and calves along with the steers you were feeding for market nor feed your brood sows and young pigs in the same pen with the fattening hogs. The old hens and cocks will naturally be marketed before the age of unprofitableness arrives. All such as are kept longer eat into the profits. You will also use every precaution against disease for here is one of the great big leaks on the average farm, disease and vermin. Disinfect several times a season and keep things clean at all seasons. Market every chick when it arrives at the earliest market age. Keeping chicks till the price runs down creates another loss easily averted. Be sure to gather up your eggs and take special pains to keep them fresh and clean till market day and market at the earliest opportunity. Create a demand for your eggs at a better price than the average egg and then hold up your standard of excellence. Study the best methods of rearing your young stock and use every ounce of judgement you possess to rear them without undue loss. Many a farmer uses up hundreds of eggs getting out his crop of chicks when it would have been vastly more profitable for him to have sold his eggs on the market and bought what pullets he needed each fall. If you cannot rear chicks successfully do not attempt to do so on a large scale. Better a few and have it done to your profit than many which cost you more than they are worth. Have your stock

as good as you can afford. Not fancy show stuff but good, evenly bred birds of a recognized egg laying strain and of one of the general purpose breeds. Feed no feed on the bare ground. This is a source of great loss wherever practiced. The fowls pick up enough filth to keep them always in an unprofitable condition and much of the feed eventually is wasted. Better hopper feed if you cannot have feeding places provided.

Regular hours for feeding, watering, and gathering the eggs make for profits. Any fowl does better who is fed regularly. The thrifty flock is the profitable flock. Anything that makes for thrift will advance your profits.

The poultry manure is another source of profit or loss whichever you choose to make it. On most farms it is left for years to rot and wash away with the rains. It should be kept in the dry and spread on the land as soon as possible. To get best results it should be mixed with equal parts of some other fertilizer as it is too concentrated for using alone. Road dust is used by some but sawdust, plaster and gypsum are recommended as superior and of value to the land as well. In the west where litter is plentiful we usually use the soiled litter from the scratching sheds to mix with the droppings to make them go farther.

Preparing for Winter.

With chill November at hand it behooves the poultry breeder to make ready for winter. Says W. G. Warnock, Geneseo, Ill. in Poultry Pointers. In this latitude it is always safe to assume there will be plenty of cold weather. I find the same old round of work to be done every fall. Culling comes first and the longer I breed poultry the closer I am inclined to hew to the line. Sexes must be separated now if not already done. Then there is occasionally a leaky roof

to repair; poultry can stand considerable cold but dampness is a very serious matter and a leaky roof should be attended to promptly. There are windows to repair also, as I find some get broken every summer. Brood coops should be cleaned and put under cover and above all else lay in a supply of good straw for scratching material. I pity the chicken who has to pass the long winter in confinement without a chance to have a good scratch in nice clean straw. Clean sand will take the place of straw providing the feed is raked into it so as to induce exercise. At this season about every journal in the country is advising their readers to lay in a supply of road dust. I never had much use for road dust, as it is largely made up of horse manure at best. To my mind a barrel of clean moist earth placed in the cellar in the fall and given to the fowls occasionally is much better. I have tried the road dust racket for years, but I have never seen my fowls dust in it. As soon as a nice day comes and the birds get into the adjoining yard they will find a bath in the soft moist earth. Too much dust in a poultry house is very injurious to the fowls, as they fill their lungs with it without killing very many lice as many suppose.

When you are cleaning up the baby chick outfit don't forget to look after the little drinking fountains, feed vessels, etc. Scald and disinfect everything that you have used about baby chicks this season and expect to use again. It is the only way to keep free from the germs of disease that carry away so many tiny chicks every year. Even if you have a low mortality this year you do not know positively that you did not have a few infectious cases, enough to infect the ground and fixtures sufficiently to give the trouble a good start another season, so clean up.—Farmer and Breeder.

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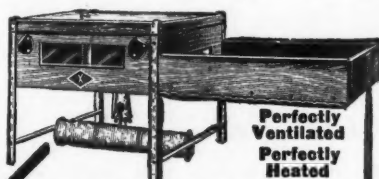
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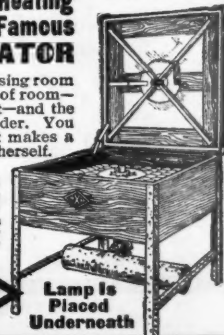
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NOTES FROM AMERICAN POULTRY ADVOCATE.

Feed the Hens so as to Keep Them in Laying Condition.

As cold weather approaches there is less food for the hens to pick up, and we shall begin to increase the amount of grain and other food we give them. After all that has been said and written about feeding hens I find that there are yet a great many keeping poultry who still have an idea that fowls need and must have all they will eat, and not be made to exert themselves in getting it. But our most successful poultrymen, those who are in the business for what eggs they can get, know and will tell you that a hen must be neither too fat nor too lean, if we expect her to be a profitable layer. Hens that are out of condition in flesh may lay a few eggs, but they will not be a success by any means as egg producers. They should be just moderately fat, and this is about the condition you will find them in during the early fall when they are running at liberty, but as soon as the flock is shut in by stormy weather and the owner commences to hand the grain out to them freely, they commence to lay on fat and are soon too fat to lay.

Anything Will Do.—Grain men seem to think that anything is good enough for hens, but consider well before putting good money into poor food for your poultry. My grain dealer charges me from five to ten cents extra per two-bushel bag for heavy oats, but it is a good investment for me. You get more "meat" in these big oats and less hull. Oats are now less in price than wheat and can be substituted to quite an extent. The oats I get weigh about 38 pounds to the bushel. These I am feeding for scratch food to hens and big pullets mixed with equal parts by measure of cracked corn and wheat. When we get an all day cold rain in October I am in the habit of filling a pail half full of these heavy oats, pouring hot water over them, and after standing two hours feed at noon. They swell, become soft and better flavored, hold a lot of the heat, and seem to suit the hen as a hot bran mash does a horse. Cracked corn is subject to mould in warm weather, though seldom in October, and it should be watched to see that it is all right. Must or mould in grain is the cause of some of the diseases that come into

our flocks and we should practice prevention. Good corn on the ear may be found at times and it makes good exercise food in winter. Field or sweet corn can well be bought and fed at any time of the year. Even now you may still have on hand some sweet corn that grew too hard for table use. If you do not need to save it for seed feed it to the cockerels that are cooped to fatten for market. In husking the field corn you will find ears that are green, too small or deformed, that are better fed at once than put into the bin with the good corn. On my farm we sort the corn as it is husked, feeding the second quality ears before cold weather.

Litter.

I would omit much litter in the houses yet. On stormy days a fork full of barley straw, with the grain on it, will keep the pullets busy and the hens contented. The large weeds from the garden can well be put into the pens, giving some seed and making a beginning of littering the floor. On the barn floor may be leaves from the corn in the husking, some husks that can be added to the scratch material you are saving. Leaves are more easily gathered this month than any other. Get just as large a quantity as you can find leaves and time. Put in bags, put in bins, put directly into the houses; leaves are worth all they cost in effort and time. Leaves make the best litter we use, but unfortunately none of us ever get enough to last over midwinter. One of the State colleges reports good success in the use of planer shavings, but I have always fought shy of their use. I do not see how the hens can avoid the eating of some of the wood—perhaps they do—and wood is poor food and likely to make internal trouble. Fine sand, garden soil, light gravel, make good foundation on which to put scratching material of most sorts. Ashes of all sorts are not to be used on stock that is to be shown. Wood ashes act on the toes and shanks through the lime and potash in them, while coal ashes are very scratchy to the covering of the parts touched. The dust that arises from too fine soil settles on everything in the house, and is apt to partly clog the nostrils of the hens. The filling of the house should not be so fine as to make clouds of dust, neither too coarse, as too hard to work over in scratching. Between the two extremes is what your hens need.

Hale's Peach Orchard.

The orchard in Fort Valley, is probably the largest collection of peach trees anywhere, and contains now about three hundred thousand trees says American Cultivator. The first shipment was made in 1902 and has steadily increased until this year, when the crop is somewhat smaller than last year on account of the unfavorable season. Some of the produce has been shipped to London, where it brought the shipper a price which netted from twenty to thirty per cent. above the New York market.

The soil is a light sandy surface with clay subsoil, and is abundant in that part of the south. The success of the enterprise is largely due to the modern refrigerator cars, which usually bring the fruit to market in first-class condition. Note—There are larger orchards than Hale's. Mr. Morrill of Michigan has one much larger in Texas.

Everything Automatic About This Henery Except the Cackle.

B. E. Morse, of Winsted, Conn., claims to have the most up-to-date henhouse in the world. The frame work of the building is of pipes, which are filled with steam and automatically keep the house at an even temperature, and act as a brooder. The eaves empty into a storage tank from which the water is piped to a trough automatically regulated.

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Mistakes With Old Orchards.

There is scarcely a farmer in this country who uses any fertilizer for his orchard, simply because he has always been taught that the old orchard would take care of itself. And what a mistake! It needs the same care and attention as the land devoted to other crops. Says Hoard's Dairyman. Why not renovate the old orchard? Cut down the worthless trees. Plough the whole area, sow to white clover and timothy, put on about 200 pounds of muriate of potash and 200 pounds of dissolved bone per acre. Keep the orchard trimmed and

each year apply chemical fertilizers in about this proportion per acre: Nitrate of soda, 100 pounds; ground bone, 200 pounds; muriate of potash, 300 pounds. By a little systematic work and study every farmer could materially increase his profit with a little extra work, and perhaps a little outlay of money. If the old orchard is hard and unproductive, first put it in fit condition for the growing of crops and the trees.

Cover the hardest spots with manure. Get humus in the soils, and with an application of potash and phosphoric acid one can feel sure that a good harvest will result.

Ringed Grape Vines.

The practice of ringing grape vines has been tested to some extent by the New York agricultural experiment station (Geneva) and the results are noted in bulletin No. 151. Two vineyards were under experiment in different parts of the state and the vines in each were ringed for two years. In one vineyard, trained upon the two arm Kniffin system, both arms were ringed beyond the fifth bud; and in the other vineyard, using the renewal system of training, the arms were ringed beyond the renewal bud.

In both orchards very marked differences in favor of the fruit on ringed arms was noticed with such varieties as Empire State, Concord, Niagara, Geneva and Catawba, the bunches and berries being larger and more compact and ripening earlier. In most cases, however, especially with higher flavored varieties like the Delaware, the quality was injured; and the grapes which naturally show a tendency to crack, like Worden, were worse in this respect on ringed vines.

The renewal system seems best adapted to this practice, but its adoption or rejection is a question the individual grower must settle for himself.

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Our trees are all grown in the north, free from scale, shapely and have an abundance of roots. We furnish all kinds of nursery stock—apple, peach, pear, plum, cherry, quince, shade and ornamental trees. Also shrubs and berries of all kinds.

WE DEAL DIRECT ONLY
Agents have no place with us. We save your commissions and expenses. It really means we put half the price trees ask into your pockets and give you better trees in the bargain.

VALUABLE 1912 CATALOG A NOW READY
Tells how to plant and care for all kinds of fruit trees. Quotes remarkably low prices. Send for it to-day. Get your order in early.

Wm. P. RUPERT & SON
BOX 70, SENECA, N.Y.

When you write advertisers Please mention Green's Fruit Grower.

GREEN'S FRUIT GROWER

AN ILLUSTRATED MONTHLY JOURNAL

GREEN'S FRUIT GROWER CO., Publishers

C. A. GREEN, Pres. and Treas. R. E. BURLEIGH, Vice-Pres. J. W. BALL, Sec'y.

Charles A. Green, Editor
Prof. H. E. Van Deman, Associate Editor

OUR CORPS OF SPECIAL WRITERS:

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NOTICE TO SUBSCRIBERS:—If any subscriber has been defrauded by any advertisement appearing in Green's Fruit Grower he will do us and the public at large a service by at once reporting this advertiser to us, giving full particulars, we will upon receipt of full particulars, investigate and will do everything in our power to bring about a satisfactory adjustment.

Subscribers who intend to change their residence will please notify this office, giving old and new addresses.

Entered at Rochester (N. Y.) Post Office as second class mail matter.

THE ROCHESTER POULTRY AND PIGEON SHOW HELD AT ROCHESTER, N. Y., DECEMBER 11-16.

Largest Poultry Show Ever Held Here.

Reported for Green's Fruit Grower.

That the poultry industry is receiving more attention each year was indicated by the recent Poultry Show at Rochester, N. Y. I have attended these exhibitions each year and have noticed that the number of exhibitors has been increasing. This year a large building known as Convention Hall Annex was filled with poultry which covered the first and second floors completely, simply leaving a passageway between the double rows of crates containing the birds. I can see each year an improvement in the grade of birds exhibited and in the condition of the birds.

It is not surprising that increased attention should be given each year when we consider that the product of the poultry business is valued each year at \$700,000,000, or more than that of the entire wheat crop of this country.

I asked one of the exhibitors which was the most valuable breed of poultry, knowing what his answer would be. He said that there was no one breed better than all others. His advice to a beginner would be to propagate the breed which he liked best, or that which he would be best satisfied with. In the selection of breed beauty has much to do. Some breeds are more beautiful than others in color of plumage. Others have queer feats of coloring which attract some people. One man may like white birds, while another will prefer to see marching over his lawns groups of jet black poultry. Others will glory in the plumage of the Barred Plymouth Rock, and still others in the beautiful color of the Brown Leghorn cockerel. The color of the eggs has something to do with the selection of the breed and the size of the eggs, but more often the breed is selected which gives the largest number of eggs.

Geese, ducks, peacocks, swans, doves, were exhibited. One man had a large cage filled with many kinds of doves. He seemed to be kept constantly employed catching these doves in order to supply those who desired to buy a pair. Doves are interesting pets.

There was a large exhibit of Single Comb Brown Leghorns. Green's Nursery Company was awarded first prize for Brown Leghorn Cockerel, second prize for Brown Leghorn pullet, and first prize for a pen of Brown Leghorn birds.

There was the largest collection of Barred Plymouth Rocks ever gathered together in one show in Rochester. There is an indication of the great popularity of the Barred Plymouth Rock birds, which are so desirable for plenty of eggs and large eggs and for their flesh, since they are nearly as large as turkeys.

CORRECTION: On page 29 of the December number of Green's Fruit Grower appears a photograph, the sender of which was Joseph H. Harvey. The photograph is that of William Harvey of New Decatur, Ala. The photograph is an interesting one and we desire to give our friends credit when they send us such excellent work.

Western New York Horticultural Society.

The announcement of the annual gathering of this veteran horticultural organization is eagerly looked for at this season of the year by not only the fruit-growers of the Empire State but also by members of the craft in many other states and in Canada, whose names are enrolled in the membership list. The next meeting will

be the fifty-seventh in the history of the Society, and will be held in Rochester, N. Y., January 24, 25 and 26—a three days' session. Secretary John Hall, who has held the office for nearly a quarter of a century, advises us that the program will not be a whit behind any of its predecessors in its practical educational features.

Prominent men in the industry have been secured, Illinois, Michigan, New Jersey, etc., being represented, in addition to which some of the leading men on the staffs of the State Experiment Station and of the New York College of Agriculture at Cornell University, will appear on the program. The Round Table feature, first introduced by this organization, will be continued, and the grape and other small fruits will be treated by men who know, while vegetable gardening will also come in for large attention. The latter phase will be the subject of a talk by H. B. Fullerton, connected with the agricultural development department of the Long Island Railway Co., who will use lantern slides.

The determination of the officials to extend the meetings to three days will undoubtedly be appreciated by the membership, as it means shorter sessions, thus enabling more time for social communion and to examine the very large assortment of exhibits for which this annual gathering is noted.

The program will be ready to mail shortly, and those desiring copies will do well to communicate with Secretary John Hall, 204 Granite Building, Rochester, N. Y. A handsome badge button, of unique design, will be issued as a receipt for dues. This year the first annual banquet of the Society will take place on the evening of January 25th.

W. C. Barry has been president of the Society over twenty years, succeeded his father.

"I see that Carnegie has given away another twenty-five millions."
"Is that so? Who got it?"
"Nobody."—Harper's Weekly.



FIELD OF A NEW CABBAGE

Buy SEEDS from the Grower

We raise seeds on our own farm. Choice selected strains of Cabbage, Beets, Celery, and other vegetable seeds. Early maturing Seed Corn, high grade Seed Potatoes. Oats and farm seeds of all kinds. Grown under our personal supervision and carefully tested. We make quality the first consideration, but our prices are lower than those charged by many other dealers. We sell direct at wholesale prices.

Large illustrated catalog free. Write to-day.
Joseph Harris Co., Box 59, Coldwater, N.Y.

HARRIS SEEDS

Borrow My New Mill

Clean and Grade Your Grain FREE!

Use 30 days, free, my 1912 Chatham Mill. No freight to pay. No money down. Clean and grade all your grain. Then take your time in paying me my low price, or send mill back at my expense.

Chatham Mill actually grades and cleans 75 seed mixtures—Oats, Wheat, Corn, Barley, Flax, Clover, Timothy, etc. Takes Oats from Wheat, any mixture from Flax, Buckhorn from Clover. Sorts Corn for edge-drop planter. Takes out all dirt, dust, chaff and weed-seed from any grain. Handles 50 bushels per hour. Hand or gas power. The outfit I loan free includes: 1912 Chatham Mill, Bagger, Power Attachment, Corn Grading Attachment and Instruction Book.

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"The Chatham System of Breeding Big Crops." Name on postal sent to nearest address brings it.

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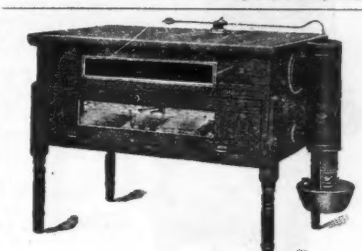
CHATHAM
Grain Grader, Cleaner and Separator



Handles 50 Bu. per Hour 1912 Model Gas or Hand Power

YOUR HENS YOUR FARM YOUR MONEY

The Story of 25 Years with Poultry and Farmers and Fanciers will help many Farmers get more eggs—better prices; make more and save more money; tell things few folks know on making money with hens. Find out about America's Largest Line of Incubators and Brooders, and get six poultry chapters written by Robert Essex himself—it's all in our Free Catalog—Write today. Address Robert Essex Incubator Co., 47 Henry St., Buffalo, N. Y.



ONE 50 egg Safety Incubator and one 50 Chick Safety Indoor Brooder at special price of \$6.00.

One 80 egg Safety Incubator and one 100 Chick Indoor Brooder for \$10.00.

We cannot fill orders for these when our present stock is exhausted. If you want one of these bargains order at once.

Green's Nursery Company, ROCHESTER, N. Y.

Wonderful Fall Bearing Strawberries

These new berries are a great success. They bear fruit every fall as well as spring, three crops in two years. They have yielded as high as 10,000 qts. to acre in Aug., Sept. and Oct. of first year, with us. We cannot get enough fruit to supply demand. I know of nothing quite so profitable. We are also headquarters for Plum Farmer, Idaho and Royal Purple Raspberries, Watt Blackberry, Early Ozark Strawberry, Hastings Potato. Catalogue of all kinds of Berry Plants free. Address L. J. Farmer, Box 207, Pulaski, N.Y.

When you write advertisers Please mention Green's Fruit Grower.

FALL BEARING STRAWBERRIES

You can have strawberries from August until November from "Superb" and "Productive" plants. Circulars free. For sale by the Originator, SAMUEL COOPER, Delevan, N. Y.

STRAWBERRY PLANTS

46 varieties. Many varieties in Raspberries, Currants. Early and late seed potatoes—standard vigor hardy varieties, northern grown. Illustrated catalog free. Mayer's Plant Nursery, Merrill, Michigan.

STOKES' SEEDS

"Seed catalog time" is here and I have a beauty with colored illustrations and a free proposition with cash prizes which you will be interested in.

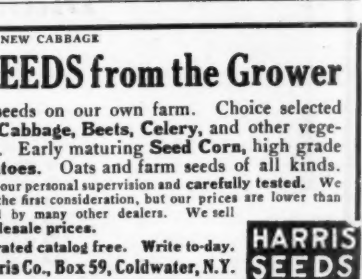
Send for a copy today—free if you mention Green's Fruit Grower.

Walter P. Stokes, Seedsman
Dept. H. Philadelphia

Free Catalog FREE Send today for pkt. Great Parsnips (50 cts.) SEEDS

and large instructive catalogue of Best Seeds at right prices. Send 2c stamp for postage. Gardeners ask for wholesale list. **ALNEER BROS.**
No. 15, A Bk., Rockford, Ill.

Free Catalog



No. 15, A Bk., Rockford, Ill.



EVERYTHING for the GARDEN

is the title of our 1912 catalogue—the most beautiful and complete horticultural publication of the day—really a book of 204 pages, 5 colored plates and over 800 photo engravings, showing actual results without exaggeration. It is a mine of information of everything in Gardening, either for pleasure or profit, and embodies the results of over sixty-two years of practical experience.

To give this catalogue the largest possible distribution we make the following liberal offer:

Every Empty Envelope Counts as Cash

To every one who will state where this advertisement was seen, and who encloses Ten Cents, we will mail the catalogue

And Also Send Free of Charge

Our Famous 50 Cent "HENDERSON" COLLECTION OF SEEDS containing one packet each of Ponderosa Tomato, Big Boston Lettuce, Scarlet Globe Radish, Henderson's Invincible Asparagus, Mammoth Butterbean Peas, and Giant Spencer Sweet Peas, in a coupon envelope which, when emptied and returned, will be accepted as a 25-cent cash payment on any order amounting to \$1.00 and upward.

In addition, all ordering from this advertisement will receive a copy of our new Garden Guide and Record. This is a handbook of general garden information, planting tables, cooking receipts, cultural directions, etc., etc., and in all is one of the most necessary and valuable of our many publications.

PETER HENDERSON & Co. 35 & 37
CORTLANDT ST.
NEW YORK CITY

When you write advertisers Please mention Green's Fruit Grower.



"EVERYBODY" Can Afford a Gasoline Engine With Galloway's New Low Prices

1 1/2 HP
\$27.50
Other Prices in Proportion



You've never before heard of such startling values—I've never offered anything like them and you know full well that no one else has ever come anywhere near my regular prices. But this time I've a startling reason. I want 10 men or more in every township in the country to own and operate a Galloway Engine—I've decided to double my factory capacity by increasing the sales force and sell two where I formerly sold one—this calls for unusual values—hence, the greatest offer I have ever made. I can save you from \$25 to \$300 on an engine according to the H. P. needed. It doesn't matter what sized engine you want I've got the one to fit your wants and do more work and better work at less actual cost than any other engine in the world. Write at once for full information of the Greatest Offer Ever Made To American Farmers—don't delay but send me your name and address now, before you do anything else. Let me prove to you in cold facts why I can put \$25 to \$300 in your pocket.

WM. GALLOWAY COMPANY

Wm. Galloway, Pres.

645B Galloway St., Waterloo, Ia.

No Such Quality in any engine

—no matter what price you pay—

the Galloway price saves you \$25

to \$300

30 Days FREE Trial

Pump Jack \$3.95

When you write advertisers Please mention Green's Fruit Grower.

Praise of The Apple.

The old Scandinavians believed that the gods subsisted wholly upon apples, and that it was through the peculiar properties communicated by this queen of fruits that they acquired the wisdom which they imparted to men.

The acids of apples are exceedingly useful through their stimulating influence upon the kidneys, whereby poisons are removed from the body, and the blood and tissues purified. The acids of apples are all highly useful as a means of disinfecting the stomach, since the ordinary germs that grow in the stomach, producing biliousness, headache, and other troubles, will not grow in fruit juice or fruit-pulp.

Quinces vs. Peaches for Profit.

Whenever a peach tree bears a full crop it is almost certain to be more profitable than any other fruit, often paying much more than the cost of the land and previous cultivation in a single crop. But the peach is very uncertain even in localities where it is a success. One crop in three years is about the usual average before a severe winter or the yellows disease kills the tree. For a steady bearer no fruit exceeds the quinces. It has no disease except the fungus red rust, which attacks leaf and fruit, and which may be prevented by spraying with Bordeaux mixture. It is true the quince is liable to borer attacks, but not more so than the peach tree, and with sufficient vigilance both kinds of trees may be saved from the borer. The quince never suffers from late frosts, as it is so late in blossoming that there is no danger from that source. If the quince trees have been sprayed often enough there is sure to be a paying crop every year, which commends it to the average farmer more than a fruit which only brings a crop one year in three.

He Likes It.

Green's Fruit Grower:—I received the December number of the Fruit Grower on Saturday, immediately after I had written you stating the paper had not arrived. I am very much pleased with your publication and find a great deal of information in it that is helpful to me. What I like about it, particularly, is that it is not only adapted to the needs of the large orchardist but is also valuable to the man who is growing fruit on a small or moderate scale. James D. Crawford, Pittsburgh, Pa.

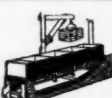
Where Apples Thrive and Pay



Lands in the Southeast, costing from \$15 to \$50 an acre, net profits on apples ranging from \$100 to \$500 an acre.

Abundant rainfall and special soils give color and flavor unequalled by fruit grown in any other climate. One Southern tree last year yielded \$124 worth of apples; another tree \$57. Peaches, pears, plums, berries and pecan nuts yield prolifically. Excellent transportation to profitable markets.

Write for full particulars to
M. V. RICHARDS, Land & Industrial Agt., Southern Ry., Room 44
1320 Penn. Ave., Washington, D.C.



CANNING FACTORIES FOR SALE
On time, percent of pack, or cash. 15 sizes. For Farms, Large Communities or Towns. Make you \$30 to \$50 a day. Write for Free Booklet.
THOS. M. BROWN, Springfield, Mo.

WHOLESALE PRICES

On Strawberry, Raspberry, Blackberry, Gooseberry, Currant, Asparagus and Grape Plants, Heavy Rooted, High Grade Stock. 20th Annual Catalogue Free.
A. R. WESTON & Co., R. 3, Bridgman, Mich.

Plant the Quality Grape CATAWBA-CONCORD

A cross between the Catawba and the Concord—so scientifically made that it unites all their merits with none of their defects. Equal in quality to the finest house grapes and as easily grown as the Concord. For two years, it has proved its superiority. Has received awards wherever shown. Write at once for large descriptive catalog of Raspberries, Blackberries, Grapes, Strawberries, Currants, Gooseberries, Garden Beans, Hardy Perennial Plants, Shrubs, Vines, Roses, etc. It tells how to plant and grow them—free to everybody.
J. T. LOVETT
Box 134 Little Silver, N. J.

Blackberry, black and red raspberry, currant, gooseberry plants, etc., for sale. Ellsworth Corner, Barnesville, O.

A boarding house and fruit farm attached. For particulars address Victor G. Berrian, Highland, N. Y., Ulster Co.

GLADOLI—Silver Trophy. Cowie's Select: Blue, Yellow, Salmon or White, 100, \$2.50; Mixed, \$1.50. Beck & Beck, Piqua, O.

Surplus sale of Raspberry and Strawberry Plants, Blackberry Plants and Root Cuttings and fruit trees at less than half price. Catalog Free. Gray's Plant Farms, Pekin, Ind.

COLD STORAGE

COLD STORAGE is the best way of keeping fruit—everybody knows that. A frost proof or common storage building is not cold storage. In a cold storage plant temperatures may be controlled by artificial means. Investigate the Cooper Bros. System, using ice and salt for cooling. Greatly superior results over common storage and also over refrigerating machinery; low first cost; absolute safety against breakdown. Madison Cooper Co., 110 Court St., Calicum, N. Y.

I Arise to Remark.

Written for Green's Fruit Grower by John Malcolm, N. J.

When I disposed of my stock of Early Kent gooseberry I used the \$150 to buy a horse which soon ran away and broke a \$150 buggy. I then sold the horse for \$60. As I made no money on this series of transactions, I don't recommend any one to grow gooseberries.—Prof. W. F. Massey.

The man who doesn't divvy up the credit for his cattle with his wife should go and live in the barn.—C. E. Bassett.

Every hog has his pedigree and every man has his; and some of us are thankful ours are not written.—J. F. Gordon.

No more fortunate thing can happen than for a dairyman to learn how to grow plants without manure.—H. E. Cook.

If you start a boy wrongly it's hard to correct him. With a tree it's not different.—Horace Roberts.

Labels cost about 35 cents a thousand. They can be very cheaply put on trees. It costs no more to write one name than another. Therefore raise your own trees.—J. H. Hale.

I am in farming because I love it and it pays me because I love it. If I didn't love it I couldn't make it pay.—J. F. Gordon.

As long as apples are sold under suspicion we will pack—well carelessly.—C. E. Bassett.

The trouble with most so-called abandoned farms is not that they are worn out but that they are rusty.—H. E. Cook.

I have not gone into the apple business because I'm too lazy. I'm strongly tempted to enter now since I've learned there's no need to prune.—Charles Barker.

It is mighty good business to let a hen lay when she wants to.—Prof. J. E. Rice. Shirt sleeve experience is always more eloquent than kid glove theory.—John W. Kerr.

"LION BRAND" TRADE MARK SPRAYING MATERIALS

Purity, Strength, Effectiveness,
At It Since 1889

Destroy Insects, Prevent Disease,
Do Not Injure Tree or Delicate Plant

Millions of Dollars Are Lost Annually by Fruit Growers and Vegetable Gardeners Because They Do Not Realize the Enormous and Increased Profit in Persistent Spraying With Properly Made Insecticides and Fungicides

When it comes to fighting insect pests in your orchard, you cannot afford to experiment with unknown insecticides of doubtful value. If the enemies of your fruit trees get a good start, all the spraying you can do will not control them. If you are fighting San Jose Scale, and use poor materials, the fact that they were poor will likely be apparent until too late to spray again, and an entire season has been lost, and a number of trees injured if not destroyed.

Your first spraying for Codling Moth is done some little time before the insects appear. If they are not destroyed just after hatching, because you have used a poor quality insecticide, you will not know it until too late to kill the first brood, and one Moth which escapes lays about fifty eggs for a later brood. Hence the value of using "LION BRAND" INSECTICIDES and FUNGICIDES of long tested and known reliability.

This is not the idle talk of a poorly posted advertisement writer, but a plain statement of facts that can be proved by any reader of THE RURAL NEW-YORKER who cares to have it proved.



Lime Sulphur Solution is for San Jose Scale particularly, and Apple Scab. Has a wonderful tonic effect, and makes the bark of apple trees smooth as can be. The only spray that destroys Scale and does not injure trees. Ready for use, and more economical than home made solutions.



The stickiest Arsenate made. Preferable for Codling Moth, Curculio, Elm Leaf Beetle and Chewing insects of all sorts, on trees, shrubs, vines, bushes and vegetables, where it is desirable that the poison should remain longer on the foliage than is possible with other insecticides. "LION BRAND" Arsenate of Lead does not burn most delicate foliage.

Blanchard's "Lion Brand" Insecticides and Fungicides

have been the Standard of the World for more years than any other manufacturer in this line has been in business

BLANCHARD'S PRODUCTS

"LION BRAND" ARSENATE OF LEAD
"LION BRAND" PURE PARIS GREEN
"LION BRAND" LIME-SULPHUR SOLUTION
"LION BRAND" BORDEAUX MIXTURE
"LION BRAND" KEROSENE EMULSION
"LION BRAND" WHALE OIL SOAP
"LION BRAND" PURE POWDERED HELLBORE

"LION BRAND" GRAFTING WAX
"LION BRAND" STICKY BINDING
"LION BRAND" WEEDICIDE
"LION BRAND" POWDERED TOBACCO
"LION BRAND" INSECT POWDER
"LION BRAND" CATTLE CONTENT
AND A NUMBER OF SPECIALTIES



Bordeaux Mixture Prevents Blight, Mildew, Rot, etc., from destroying Potatoes, Beans, Peas and Melons; keeps spots and specks off Apples, Peaches and other fruit, and makes crops surer and larger. One gallon to 49 of water.



"LION BRAND" Pure Paris Green contains absolutely not a particle of filler of adulterant of any sort, and is accepted the World over as the Standard.

WE MAKE A SPRAY TO DESTROY EVERY INSECT ENEMY AND FUNGUS DISEASE OF TREES, VINES, SHRUBS, PLANTS AND VEGETABLES

THE JAMES A. BLANCHARD CO., is the oldest, most responsible and best equipped manufacturer of Insecticides and Fungicides in the World.

None but the purest and best-for-the-purpose ingredients are used. Every formula is scientifically correct and thoroughly tested to be the most effective, and safest for its purpose. For 23 years we have made nothing but Insecticides and Fungicides.

Insects and fungus diseases have become so numerous, so destructive, persistent and aggressive that it is admittedly impossible for fruit growers and vegetable gardeners to get crops that can be profitably sold without using Insecticides and Fungicides, and those who grow profitable crops do use them, and know it is plain common sense, and a most economical safe-guard to do so.

LION BRAND INSECTICIDES and FUNGICIDES cannot be surpassed in uniform quality, and are guaranteed under the Insecticide Act of 1910.

We want every one who has a fruit tree of any character, or a bush, or a vine, or a shade tree, and every one who grows vegetables, even if only potatoes, to have a copy of our

FREE SPRAYING BOOKLET

wherein we explain why and how spraying insures larger crops and better quality. Just send your name and address to our nearest office. Blanchard's Products are sold by dealers and agents everywhere, or direct, if your dealer cannot supply them. Look for the Lion Brand Trade Mark and take no other.

THE JAMES A. BLANCHARD CO.

568 Hudson Terminal, New York 569 Broad St., St. Joseph, Mich.
Factories: New York and St. Joseph



Letters From the People.

"Prudent questioning is the half of knowledge.—Proverb.

Grand Forks county, North Dakota, grew in one season more wheat than any other county in this country or in the world. One farmer there employed two steam threshing machines of large capacity six weeks in threshing his wheat crop.

Two Pigs.

Editor of Green's Fruit Grower: I once bought a pig for \$3.00 and another one for \$4.00 for the purpose of fattening. I gave these pigs careful attention, treating the two precisely alike. When the pigs were fattened and sold, the pig I paid \$4.00 for sold for twice as much money as the one I bought for \$3.00. Here is a lesson teaching the value of improved breeds of swine, for the \$4.00 pig was well bred while the \$3.00 pig, though of about the same size when purchased, was of ordinary breed.—E. E. Hale.

C. A. Green's Reply to Anlon Stalson, Mich.: I have no experience such as you mention with Cuthbert red raspberry. I suspect that it is not anthracnose that troubles your plants but that it is an insect. There is an insect which bores a hole in the cane, which causes the cane to fall over and wilt in summer.

Fall Ploughing.

Editor of Green's Fruit Grower: I have been taking your paper for a number of years and for two years I did not take it, but I always saved the papers as they come, and looking over the old ones, I found I was missing a lot that I should know. I got a lot of valuable information out of your paper on the orchard, and will say I built up a fine orchard through your good advice. Now gentlemen, I want you to send me the paper again—Green's Fruit Grower I mean. I enclose fifty cents for one year. Is fall ploughing injurious to an orchard, or is spring ploughing best.—Enoch H. Lavender, Lapland, Lunenburg County, N. C.

C. A. Green's Reply: If the orchard is in sod I would advise plowing it very shallow, not deeper than four inches, in the fall. If the orchard has been cultivated the past season I can see no benefit in plowing it in the fall. Fall plowing would be objectionable in causing the soil to wash away more of its fertility, but might be helpful in destroying some insects or germs of disease that might linger in the leaves or other refuse under the trees. As a rule cultivated orchards are not plowed in late fall. All cultivation is stopped in August so as not to promote late growth.

Mr. W. P. Estes, Connecticut: Thanks for your favor with \$1.00 for subscription. I advise you to be slow in destroying any healthy old apple tree. Let it stand until it fruits so that you can decide whether the fruit is of good variety. If the variety is not good the trees can be removed, but I would save all that yield good fruit. The locust trees or anything else of that kind must be dug out before the orchard can be made entirely a success. Land in fruit should be kept well cultivated. I would plant a new orchard while testing the old one. I advise you to plant a few trees each year rather than to plant everything in one year. Select moderately high fields for fruits as they do not do so well on low land. I send you my book, "How I Made the Old Farm Pay." I advise you to make haste slowly and learn by experience every year. This is the way I started and it is a good way for everyone to start in fruit growing.

Mr. C. A. Green: I have just been reading in the Fruit Grower an account of the large yields of apples in different parts of the United States and I want to add my experience. I have an orchard of 99 Baldwin trees set 35 feet apart each way, making about two and a quarter acres. These trees are just twenty years old and produced this year 450 barrels of apples which I sold to a Chicago firm for \$2 per barrel net, making \$900 or \$400 per acre, the drops sold for fifty dollars and paid the expenses of picking, as I had to pick them. Gross income per acre, \$410. Net \$400. Some of these trees picked eight barrels of fruit. This orchard was seen by buyers from New York city, Philadelphia and Chicago, and acknowledged to be the finest they had seen. In packing they did not cull out three per cent., practically no wormy ones, not two per cent. I spray with engine power and use lime and sulphur for scale and arsenite of lead for codling moth. I have other orchards just com-

mencing to bear. This is an ideal soil for all fruits and especially apples; anyone wishing to start in fruit growing could not do better than locate here. Land \$50 to \$100 per acre, buildings included.—J. M. Rouse, Greene County, N. Y.

Editor of Green's Fruit Grower: The leasing of orchards is practiced in a small way, in Michigan. I first heard of it through Mr. T. A. Fauand of Eaton Rapids. Mr. Fauand told me he had started at least twenty-two others and knew of no failures. Leases to be profitable, should run at least five years. Rental as based on the number of trees; their age, condition, and variety, and runs from ten cents per tree to seventy-five cents. For well formed trees of a good commercial variety in bearing—thirty cents to fifty cents is the rule. If the orchard is old and badly neglected, fifty cents is a high price. The contract should be in writing and should contain every item of the agreement. I rent for cash and agree to prune, spray and cultivate. The landlord agrees to keep up fences and furnish water for spraying.—James M. Brady, Michigan.

Make \$25 to \$50 Weekly

Selling the Automatic Combination Tool in your home county. A Fence Builder's Tool, Post Puller, Lifting Jack, Vice, Wrench, etc. Used by Farmers, Teamsters, in Factories, Mills, Mines, etc. Weight 24 lbs. Capacity 3 tons. No experience necessary. Free instruction. Write for special offer to live agents. Send no money. Name county where you live.

AUTOMATIC JACK COMPANY
Box 127 Bloomfield, Ind.



Asparagus

My stock of choice roots for 1912 is very large and extra fine. Six varieties of healthy, thrifty one and two-year-old roots. Special prices on large orders. Complete cultural directions with each shipment.

Write today for Free Catalog of Trees, Strawberry Plants, Vines, Garden Tools, etc., Spray Pumps and Spraying Calendar.

ARTHUR J. COLLINS

California Privet

Best of the Hedge Plants—an ideal hedge for lawn purposes. A quick grower. No thorns. Easily trained. California Privet is generally known and universally popular. Particularly suitable for private grounds. Perfectly hardy and almost evergreen. Large stock. Prompt shipments. Order early.

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Box A

Moorestown, N. J.

Valuable 64-page Farm and Garden Handbook FREE!

The Planet Jr 1912 catalogue is an *instructive* handbook of short cuts to best results for farmers and gardeners *everywhere*—not simply a list of implements. It illustrates 55 latest-improved Planet Jr tools, showing many in *actual use*. 64 big, helpful pages. Write for it at once! **Send postal today!**

S L Allen & Co
Box 1107G Philadelphia Pa

No. 11 Planet Jr Double Wheel Hoe, Cultivator, Plow and Rake works both sides of plants thoroughly and rapidly at one passage, until crops are 20 inches high. This fine tool has indestructible steel frame and steel leaf lifters.

No. 4 Planet Jr Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, and Plow sows seed accurately and works quickly, easily, thoroughly. Wonderful all-round garden tool and money-saver.

Buy From Us By Mail!

Save Middlemen's 50% Profit on Sash, Doors, Millwork and Lumber

"Let Us Ship You a HOUSE!"



\$857 buys all the Lumber and Millwork for this fine eight-room house. Plan No. 121.

This house has Reception Hall, Living Room, Dining Room, Kitchen, Pantry, three Bed Rooms, Bath Room, ample Closets and two Porches. Artistic and convenient.

Free Catalogs Offer 5,000 Bargains!

Quality, Safe Delivery and Satisfaction Guaranteed or Back Comes Your Money!

Write for our Grand Free Millwork Catalog, our Lumber Book, our Roofing Book and our Complete Book of Plans for Houses, Barns and all kinds of Farm Buildings. Do it right away. If you are going to build, remodel or repair, these books will save you a whole lot of money. We save you the huge profits of jobbers, wholesalers and retailers—about 50 per cent. Our Building Material is all high grade, and we guarantee quality, safe delivery and satisfaction or agree to refund every penny. Three great banks stand back of our guarantee and upwards of a million customers testify to our fair dealing.

Largest Stock in the United States

We operate the largest independent Building Material Plant in the United States and carry a tremendous stock of latest style Doors, Windows, Mouldings, Stair Work, Porch Work, Finishing Material, Flooring, Ceiling. We can ship stock sizes within 48 hours after order is received.

Save Hundreds of Dollars on Your New House or Barn!

We save our customers from \$300 to \$500 or \$600 on the average house, depending, of course, on size. Hundreds of letters from customers throughout the entire country testify to this fact. See letters in catalog for proof.

House and Barn Plans Free to Customers

Complete Architect's and Blue Print Plans and Specifications, supplied free, save you the usual architect's fee of \$25 to \$300. Our \$5.00 Plan Book contains 50 complete plans of Houses, Cottages, Bungalows, Barns, etc. Cost never exceeds our estimate. Plan Book Free. Send 10c for postage and mailing.

Stair Newels, \$2.50



4-Light Barn Sash, 30c Porch Bracket, 5c



\$698 buys all the Lumber and Millwork for this 8-room house. Plan No. 100.

This house has Reception Hall, Living Room, Dining Room, Kitchen, Pantry, four Bed Rooms, Bath Room, ample Closets and front and back Porches.



Corner Blocks 2c

Head Blocks 4c

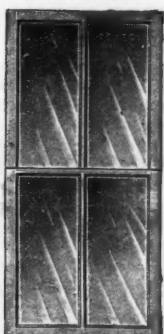
100 Feet Quarter Round 25c

ROOFING Per Roll of 108 sq. feet . . 93c

From Our Banks

Three big banks, in Davenport, Iowa, and Chicago, testify to our reliability and financial standing. You are perfectly safe in sending money with your orders. See their letters in our catalog.

77c for this Strong Door



70c for 4-Light Check-Hall Window

Get Our Grand FREE Catalogs and Magnificent Book of Plans

We positively guarantee to save you money on any Building Material you may need. We save our customers more than a million dollars a year. Our new catalogs offer over 5,000 astounding bargains in Millwork, Lumber, etc. By the use of new labor-saving machines we have again cut the cost of production. We give you the benefit of our vast facilities and wonderful economies. We have been here in the lumber business since 1865 and by fair dealing have built up this business to the largest of its kind in the world. We want you for a customer. All we ask is an opportunity to prove to you that Gordon-Van Tine quality, price, promptness, courtesy and square dealing mean exactly what we say. Get our catalogs. See what wonderful bargains we offer. Think and act for yourself. Send coupon or letter at once.

LUMBER

at Lowest Prices in America

We save you \$100 to \$300 on a carload of choicest Lumber. Every piece guaranteed up to official grades. We own our own timber land and mills. Price List FREE!

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GORDON-VAN TINE CO.
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Please send the books checked below to

Name.....

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☐ Millwork ☐ LUMBER ☐ Roofing ☐ Plan Book

If you wish Plan Book, enclose 10 cents for postage and mailing.

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(121)



Make your \$5000 Farm worth \$25000

A farm that yields \$1,000 a year is worth, say \$5,000; if it yields \$5,000 a year, it is worth \$25,000, and so on. It takes good management and many acres to produce \$1,000 net each year raising grain and stock. Good management on only a few acres will produce \$1,000 net a year growing fruit. A fruit farm of the same size as a grain farm, in the same location, with the same amount of work, will yield and be worth five times as much when it is offered for sale.

Orchards do it; They are Safe and Profitable

With modern methods you can produce large crops of perfect fruit every year. Market demands are such that you can sell this fruit for at least three times the producing cost. Success in fruit growing is only a matter of following well-known rules. Granted that you have the ambition and the energy, and sufficient capital, you are absolutely safe in planting an orchard. If you know how, so much the better; if not, don't let that hinder you—we'll tell you how.

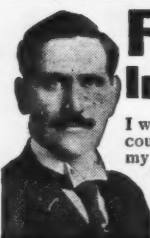
"How to Grow and Market Fruit"

Explains what is needed, why it's needed, and then directs you how to do everything required. Nearly 150 pages, 24 pages of pictures that show how, strongly bound, will last for years. Free to customers who buy \$5 worth or more of trees. To others the price is 50 cents, subject to rebate on \$5 order.

Our live 1912 catalog tells you what you ought to know when you plant trees. Ready in February, and sent free. Write for it today.

HARRISON'S NURSERIES

Ocean Avenue, Berlin, Maryland
Valuable Maryland and Delaware Farms for Sale
—Write for particulars.

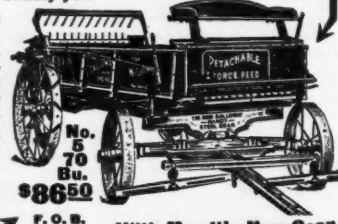


FIRST TEN MEN OR MORE In Every Township—Answer!

I want to place 10 Manure Spreaders or more in every township in the country in the next few months. And that means that I have to cut my prices to the bone to do it! So the first ten men or more who answer this from each township will receive a startling offer on the best Spreader in the world—Galloway's New No. 5, with Mandt's New Gear. A gift of as good as \$50 to these men—be one of them! Why hand over \$50 extra to a dealer or agent when you can buy direct from Galloway? Keep the money in your pocket and get a better machine. My 45-55 bushel Spreader, \$39.50—complete with trucks, \$64.75—sent on 30 to 60 days' free trial—money back if it doesn't satisfy you.

Don't Wait! Get quick action on this wonderful offer. Be one of the first from your township. I have the world beaten on Manure Spreaders—Mandt's famous new gear and eleven special patented features that cost you not one penny extra. My prices to you are less than your dealer can buy Spreaders for spot cash in car load lots! Send your name and address on postal today, and my big offer will go to you at once.

WILLIAM GALLOWAY, President
William Galloway Company, 869AB Galloway Station,
Waterloo, Iowa



FRUIT TREES

800,000 APPLES
675,000 PEACH
We grow what trees we sell direct to the planter from bearing orchards at wholesale prices which are 75% less than you pay agents and dealers. Every Tree as Represented and Guaranteed True to Name. Free from San Jose Scale, fresh dug, the best for orchard planting and personal attention given each order. Everybody write for free illustrated catalogue. Established 26 years; 250 acres; capital \$60,000.

MALONEY BROS. & WELLS CO., Box 12 Danville, N. Y.

SMUDGE OIL, FOR ORCHARD HEATING
and best Kerosene Oil made for Incubators and Brooders. Prices reasonable.
A. B. BIRCHARD, Warren, Pa.



HAYES' SPRAYING TOWER

Makes hard work easy. Sprays high or low branches with ease. No climbing, no hose to drag, no extension rod to hold. Mount it on any farm wagon or power outfit. Dis-mount and set it up again in 1 minute. Send your address on a postal card, right now. I want to tell you more about it.

F. G. HAYES
131 Ohio St., Sharon, Pa.

FOR MENDING HARNESS

It takes shoes, tents, awnings, pulley belts, car-wax pots, saddles, suit cases, buggy tops, thread, dash boards, or any heavy material. STEWART'S AUTOMATIC Sewing Machine. It is indispensable for farmers. Agents wanted. Sent prepaid for \$1.25. Send at once for catalog. STEWART-SKINNER CO., 81 Norman Street, Worcester, Mass.



THE SMITH STUMP PULLER
This photograph shows the work of the Smith Stump Puller, pulling stumps with two ponies, stumps that run from 4 to 6 feet through, at an average cost of 5 cents per stump. Write for our free Catalog. W. SMITH GRUBBER CO., 7 Smith St., La Crosse, Minn.

Trees That Grow Bread.

The bread-fruit tree of Ceylon is remarkable. Its fruit is baked and eaten as we eat bread, and is equally good and nutritious. In Barbutu, South America, is a tree which by piercing the trunk produces milk with which the inhabitants feed their children. In the interior of Africa is a tree which produces excellent butter. It resembles the American oak, and its fruit, from which the butter is prepared, is not unlike the olive. Park, the great traveler, declared that the butter surpassed any made in England from cow's milk. At Sierra Leone is the cream fruit tree, the fruit of which is quite agreeable in taste. At Table Bay, near the Cape of Good Hope, is a small tree, the berries of which make excellent candles. It is also found in the Azores. The vegetable tallow tree grows in Sumatra, in Algeria and in China. In the island of Chusan large quantities of oil and tallow are extracted from its fruit, which is gathered in November or December, when the tree has lost all its leaves. The bark of a tree in China produces a beautiful soap. Trees of the sapindus or soap-berry order also grow in the north of Africa. They are amazingly prolific, and their fruit contains about thirty-eight per cent. of saponin.—Ladie's Home Journal.

Plant An Orchard.

People talk about investing money so that it will earn dividends in the future. In former years, a good farm was looked upon as one of the best places for investing labor and money. In recent years, many people have become doubtful about this, but here comes an opinion from a shrewd business man:

You can come into some of our New England hill towns, not very far from the railroad, and buy a farm of from 100 to 150 acres, a good old house and rather poor barns, at anywhere from \$800 to \$1,500. On such a farm you can find from 40 to 60 acres of land, which if planted in apple orchard and fairly well cared for would in 10 or 15 years from now be paying you a cash dividend on at least \$50,000.

Facts About Quinine.—It is to be assumed that everyone in the civilized world has taken a dose of quinine at some time or other. It is the universal drug. Its value is unappreciated by the masses who use it only for colds and fevers. As a tonic it is unsurpassed. As an alternative it has no equal in materia medica.

A distinguished surgeon has said: "If I wanted to ferment a barrel of cabbage in less time than any one else could, I would put in it an eighth of an ounce of quinine. A little in disordered stomachs acts just about as it would in the cabbage. It hastens the assimilation of the food and restores normal conditions."—Chicago Chronicle.

Dangerous to Box Ears.

"Don't box a naughty child's ears. Don't allow any provocation to tempt you to strike a child on the head," is the injunction contained in an article on skulls issued by the International Hygiene Exposition at Dresden. Corporal punishment of any kind, says the writer, is wrong, but when the head is the point of contact between the angry parent and the child the former may easily become a murderer. In a collection of skulls at the exposition, lent by the Wurzburg University, there are many children as well as adults which show that the abnormally thin skull is not unusually found, even in otherwise normal human beings, and the causes of death, which are stated on cards attached to the skulls are intended to serve as warnings to parents, teachers and guardians.—New York Tribune.

Facts For the Curious.

Only mankind, whales, elephants, eagles, turtles and parrots live to be 100 years old.

It takes 4,221 pounds of ore, 2,310 pounds of coke, which means about 3,000 pounds of coal, and 1,147 pounds of limestone—a total of over four tons of ore, coal and limestone—to make a ton of pig iron.

The Shah of Persia possesses one of the finest bedchambers in existence. Its suite of furniture is manufactured from ivory and inlaid with gold and precious stones. The curtain hangers are of the finest Brussels net, interwoven with silk.

"Dear me," said the potentate, "who are those people and what is the meaning of their enormous badges?"

"Prince," was the reply, "they are members of a temperance society and their badges signify that they never get drunk."

"The prince frowned. 'If I wore a big badge,' he said, 'for every wrong thing I don't do, you wouldn't see my clothes at all.'"—New York Tribune.

Sixty-four Years!

Every packet of Henderson's seeds that is sold has behind it the experience of 64 years of successful seed growing and selling. The methods of seed testing and trials that were the best three generations ago, have been improved and bettered by us from year to year and are to-day still the best. The initial cost of the seeds is really the smallest cost of your garden and it pays to be sure you have started right. Henderson's are Tested Seeds.

Special Offer

Our 1912 catalogue, Everything for the Garden, a book of 204 pages, over 800 illustrations, color plates, etc., will be mailed on receipt of 10 cents. In addition we will send our Garden Guide and Record and our collection of 6 Henderson's Specialties, in a coupon envelope which will be accepted as 25 cents on any order of one dollar or over.



Peter Henderson & Co.
35-37 Cortlandt Street
New York

HOW TO GET BETTER LIGHT From KEROSENE (Coal Oil)

Recent test by Prof. Rogers, Lewis Institute, Chicago, and Prof. McKergow, McGill University Montreal, on leading oil burning lamps show the Aladdin Mantle Lamp is the most economical and gives over twice as much light as the Kero and other lamps tested. It is odorless, safe, clean, noiseless. Better light than gas or electric. Every Aladdin Lamp fully guaranteed and protected by patents in nearly every country on earth. Our burners fit your old lamps. To introduce the Aladdin, we will give **ONE LAMP OR BURNER FREE** in each neighborhood. Send postal with name and address, ask for cat-AGENTS. Ball sold over 1000 on money back catalogue M. Bruner sold 800 in 15 days. Ask for liberal agency proposition. Sample lamp furnished. MANTLE LAMP COMPANY, 179 Aladdin Building, Chicago, Ill.



Red Cross Dynamite Doubles Yields

of corn, cotton, cereals, and all fruits and vegetables.

Ordinary plowing turns over the same shallow top-soil year after year, forming a hard and nearly impervious "plow sole" that limits the waterholding capacity of the land and shuts out tons per acre of natural plant food. Dynamiting the subsoil makes this plant food available, aerates the soil, protects vegetation against both drouth and excess rainfall, and soon repays its cost in saving of fertilizer expense and largely increased yields.

There is a new and better farm right under the old one. Subsoiling with Red Cross Dynamite gives you 6 feet of top soil instead of 6 inches.

Write for Free Booklet

To learn how progressive farmers are using dynamite for removing stumps and boulders, planting and cultivating fruit trees, regenerating barren soil, ditching, draining, excavating and road-making, ask for *New Farms For Old*, No. 31

DU PONT POWDER CO.
PIONEER POWDER MAKERS OF AMERICA
WILMINGTON, DEL.

How to Get the Greatest Set of Postal Cards Ever Made

Does This Interest You?

Last month on this page we made what we consider a very liberal offer to our readers. This month we are making a still more liberal offer, and it is this: If you secure for us four new yearly subscribers to Green's Fruit Grower at 25 cents per year, we will send you the complete trip that Aunt Hannah took through Europe last summer. This trip is shown on 50 handsome Post Cards with a complete description on the reverse side of the cards, of each place visited by her. We will mail sample copies on request to use for canvassing for these subscribers. It seems to us that you can not afford to let this opportunity go by. This set of views will give anyone a liberal education on the most important sightseeing places one would wish to visit in England, Ireland, Germany, France, Italy, etc.

Surely anyone can secure one of these trips by a little effort.

Green's Fruit Grower Company

Dept. 3

Rochester, N. Y.

BEGIN TO-DAY—Send us your name and address and we will send you sample copy of Green's Fruit Grower, talking points and order blanks. **IT'S EASY.** Begin at once and get these beautiful cards before it is too late.

BUILDING MATERIAL PRICES ABSOLUTELY SMASHED!!

SEND US YOUR LUMBER BILL FOR OUR ESTIMATE

\$493 Our price for the material to build this house.



HOUSE DESIGN No. 111

Here is a neat, cozy, little cottage that can be built at the minimum of cost under our guaranteed building proposition. Size, 23 ft. 6 in. wide by 33 ft. Five rooms and bath. All the comforts desired by home-loving people. Extra large porch. Convenient interior. For the price it is impossible elsewhere to secure a home with so many excellent features.

\$635 Our price for the material to build this house.



HOUSE DESIGN No. 149

The Mansard roof construction of this design enables the owner to utilize all space to the best advantage and get the very most to be had for the money. Size, 21 ft. wide and 28 ft. deep; six rooms, bath and basement. This design offers more convenience than many larger and higher priced houses. Is constructed of the very best materials at a magnificent saving.

\$698 Our price for the material to build this house.



HOUSE DESIGN No. 6

This is our leader. Size, 23 ft. by 33 ft. 6 in.; 7 rooms and bath. There has never been a design offered that can be built in so economical a manner with less material to produce satisfactory results and a general effect of elegance than this house. Has satisfactorily been built more than 400 times during the last two years. A beautiful home at a splendid money-saving price.

\$835 Our price for the material to build this house.



HOUSE DESIGN No. 130

Size, 25 ft. 10 in. x 29 ft. 6 in.; eight rooms and bath, pantry, vestibule and large hall. A square, solid, substantial construction. All space is advantageously utilized. The Colonial windows and porch columns are distinctive features. For convenience and artistic arrangement, general elegance of appearance, and low price, this house is unequalled.

CHICAGO HOUSE WRECKING COMPANY THE GREAT PRICE WRECKER.

We buy supplies at Sheriffs', Receivers', and Factory Sales, besides owning outright saw mills and lumber yards. Usually when you buy your building material elsewhere for the complete buildings shown in this advertisement, it costs you from 50 to 60% more. By our "direct to you" methods we eliminate several middlemen's profits. Every stick of lumber and every bit of building material offered in this advertisement is guaranteed brand new and first class; as good as you can purchase from anyone anywhere.

You run no risk in dealing with us. Our capital stock and surplus is over \$1,500,000.00. Our 19

CORRUGATED ROOFING Per Square \$1.25

Roofing Prices Smashed. Metal roofing is superior to all other coverings. A fact proven absolutely and conclusively of 100 years' of actual experience. We carry a complete stock of all styles. Here is a roofing offer that has never before been equalled. We have 5,000 squares of Corrugated Iron Roofing sheets all 22x24x1 1/4 in. corrugation. Strictly new first-class that we offer at \$1.25 per square Free on Board Cars at Chicago. At this price we do not pay the freight, but if you will write us for our Great Roofing Offer, we will make you Freight Prepaid Prices lower than ever offered in the history of roofing material.

Our stock includes painted and galvanized. We can furnish it in flat, corrugated, standing seam, "V" crimped, brick siding, beaded ceiling and in ornamental fancy ceiling. In fact we can furnish you every want in the covering line. A hammer is the only tool needed in putting on all grades but the standing seam. We give you free with every order for 3 squares or more a handsome serviceable crutchable steel hammer that ordinarily retails from 75c to \$1.00. Write today for our Great Complete Roofing Catalog, and our latest Roofing quotations.

"PREMIER" HOUSE PAINT Per Gallon \$1.08

Mr. V. Michaelsen, Supt. of our Great Paint Dept. is probably the best known paint man in the world. His picture has appeared on millions of gallons of cans. He is our guarantee of quality. Our Ready Mixed "Premier" Brand of Paints are made under a special formula and will give the best service and satisfaction. Our prices range from \$1.08 to \$1.21, depending upon quantity.

Our "Premier" Barn Paint is an ideal protection for barns, roofs, fences, outhouses and all general purposes. This is a paint in which Mr. Michaelsen has put all his personality. Comes in green, maroon, yellow, lead, red and slate.

In 1 gallon cans, per gallon, 82c. In 25 gallon cans, (1/2 barrel), per gallon, 72c. Write to-day for our Great Color Card and prices.

\$37.50 BUYS COMPLETE BATHROOM OUTFIT

Here is an outfit that is good enough for any home. It is strictly a No. 1 and first-class in every particular. The bath tub and lavatory are white porcelain enameled over iron. The closet is a syphon acting low down outfit.

It is our lot No. 5-AD-33. Our handsome Plumbing Catalog lists many other outfits ranging in prices from \$25.50 to \$92.50. We will furnish all the Plumbing material needed for any of the houses shown in this advertisement, including one of the bathroom outfits described above, besides a one piece roll rim white enameled kitchen sink, with white enameled drain board, a 30 gallon range boiler and all the necessary pipe and fittings, and all material of every kind to complete the entire plumbing system, including all fixtures, furnished with iron pipe connections for the sum of

\$83.95

WALL BOARD Our Magic Wall Board is positively the best on the market. This is the Wall Board that has a backing of regular 4 ft. lath and Asphalt Mastic, the face side of which is heavy card board, properly sized, ready for calceining, paint or wall paper. It comes in sheets four feet square. Write us what space you wish to cover and we will send you descriptive circular and name you delivered prices. Be sure to mention Mastic Wall Board M-W-22. Price per square

\$2.50

years of honest dealing guarantees absolute satisfaction. Any material not up to our representation may be returned at our freight expense both ways and money refunded in full.

Our wonderful spring building offer sets a new pace in the building world. Never before have such remarkably low prices been published.

Our stock includes practically every manufactured article. Besides building material we have a complete stock of Dry Goods, Clothing, Boots and Shoes, Furniture, Household Goods, Groceries—in fact everything needed in the home, on the field or in the workshop.

READY ROOFING, PER SQUARE 85c

Our Rawhide Roofing is the highest grade roofing at the lowest price ever offered. It has a foundation of tough fibre texture so substantially prepared that it is well-nigh indestructible. Every foot carries our iron-clad guarantee to be absolutely right.

In addition to our high grade Rawhide Roofing, we offer for a limited time 10,000 squares of our Ajax Brand of Ready Roofing at 85c per square. It is put up 108 square feet to a roll. Price includes large headed nails and cement sufficient to lay. While it is practically the same as our Rawhide Roofing, it does not come in continuous lengths; maybe two or three pieces to a roll; of course that does not effect the quality. Our price for this Ajax Brand, 1 ply, is

85c

This price includes freight to Illinois, Indiana, Iowa, Wisconsin, Ohio and Michigan. Write today for free samples.

LUMBER PRICES SMASHED

Now is the time to get our prices on lumber or building material. Do not hesitate to send us a list of your wants, whether it is lumber or mill work, complete house, barn or corn crib, or a plan of your own that you wish developed. We have the best Lumber Yard in the United States, experienced Architects, and can give you unequalled service in shipment, quality, finish and design. We are the only concern in the United States that has all the building material right here at Chicago where you can come and see it loaded, and from which point IMMEDIATE SHIPMENT can be made. We can furnish everything from a common board to the finest Quarter-Sawn Interior Finish, including Mill Work, Doors, Mantels, Columns, Slide Boards.

Following are some of our bargain prices:

Extra Star A Star Washington Red Cedar Shingles, Per M. \$3.39
2 all Clear Washington Red Cedar Shingles, Per M. \$3.78
No. 1 Drop Siding, Yellow Pine, kiln dried, Per M. \$23.50
No. 1 Flooring, 4 in. Yellow Pine, Per M. \$19.00
No. 1 Ceiling, 3/4 x 4 in. Yellow Pine, kiln dried, Per M. \$16.50
No. 2 Ceiling, 3/4 x 4 in. Yellow Pine, kiln dried, Per M. \$14.00

GALVANIZED WIRE Per 100 \$1.25

This is our price for Smooth Galvanized Fence Wire, known as Wire Short. It comes in various lengths, put up 100 lbs. to the coil. \$1.25 is our price for our 6-gauge; other gauges in proportion.

We offer brand new Galvanized Spt. Barbed Wire put up on reels, containing about 100 lbs.

Price per 100 lbs. \$1.85

We can furnish this also in 4 point at the same price; also in painted at \$1.50 per 100 lbs.

Better order now while this remarkably low price exists.

25 inch Square Mesh Hog Fencing, per Rod 15 Cts.

Here is a bargain such as has never been offered. A heavy weight new Galvanized, well built hog fencing, suitable for general purposes at 15c a rod. Other sizes at equally low prices.

Crimped Wire for Re-inforcing.

We can furnish No. 9 Galvanized Crimped Wire in lengths required for re-inforcing purposes. Price per 100 lbs. \$2.25

Write for our Wire and Fencing Catalog. Tells all about our Samson's Woven Wire Fencing. Also quotes low prices on Barbed Wire, Smooth Wire, and tells about Lawn and Garden Fencing; describes gates and posts.

IRON PIPE AND FITTINGS

Rejuvenated Pipe, in random lengths, complete with couplings suitable for gas, oil, water and conveyance of all liquids. Sizes 1 inch to 12 inch.

1 inch, per foot, 3c 12 inch, per foot, 3 1/2c

Send us specifications and we will quote for your exact requirements. Also a complete stock of valves and fittings.

Our price for the material to build this barn. **\$580**



OUR JOIST FRAME BARN No. 221

Size, 36 ft. by 48 ft. Height to top of roof, 38 ft. 6 in. The most practical and serviceable barn ever designed. No heavy timber in the entire structure. Self-supporting roof. No joists in hay-loft. This design represents strength, rigidity, economy of construction, and is absolutely dependable and substantial. Write us for more complete information.

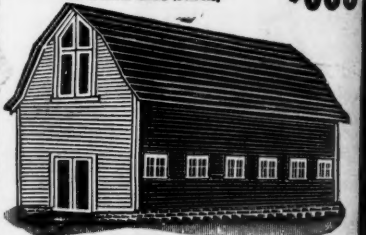
Our price for the material to build this barn. **\$620**



OUR "STAR" BARN DESIGN No. 270

Size, 53 ft. wide by 80 ft. long, 24 ft. to comb. An ideal barn for farmers raising stock on a moderate scale; balloon type. The hay-mow extends to the ground floor and above the grain rooms on each end of the barn. Cattle stalls on one side of the hay-mow; horse stalls on the other. Excellently ventilated in every part. A practical barn well built of guaranteed first-class material, and will give excellent, all around satisfaction.

Our price for the material to build this barn. **\$639**



BARN DESIGN No. 250

Size, 30 ft. wide and 60 ft. long, 13 ft. to top of the plate. A barn arranged exclusively for horses. Has 12 single stalls, 6 ft. each, and 6 double stalls, 10 ft. each. Ten foot driveway. Can also be used as a horse and a cattle barn and will accommodate 12 horses and 18 head of cattle. A building of brand new high grade materials, dependable construction, sanitary and generally convenient throughout.

Our price for the material to build this barn. **\$955**



ROUND BARN DESIGN No. 208

Size, 60 ft. in diameter and 16 ft. high to plate. Has 14 sides, each side 14 ft. A 16 ft. silo in the middle, same being 36 ft. high and will hold 160 tons of silage. Hay capacity, 65 tons. Will accommodate 160 head of cattle. The many and excellent features offered by this construction, the high grade materials furnished by us, and our extremely low price makes this a barn bargain worthy of thorough investigation.

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